



MASTERTEC

SPECIAL ARTICLES FOR REINFORCED CONCRETE CONSTRUCTION



SWELLING TAPES

JOINT SHEET METAL

**INJECTION HOSES
CONSTRUCTION CHEMISTRY**

**PRESSURE WATER-TIGHT
SERVICE DUCTS**

LIGHTNING PROTECTION

FORMWORK ACCESSORIES

PRICE LIST 2020 2021



MASTERTEC

SPECIAL ARTICLES FOR REINFORCED CONCRETE CONSTRUCTION

More than 20 years of experience in the development and production of special articles for reinforced concrete construction make MASTERTEC one of the leading specialists in the area of water-impermeable structures. Our innovations in the areas of swelling tapes, joint sheet metals, injection hoses, construction chemistry, pressure water-tight service ducts, lightning protection and formwork accessories are used on building sites all over Europe. A Europe-wide dealer network guarantees fast availability of our products.



MASTERTEC GmbH & Co. KG

Special articles for reinforced concrete construction

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Hours of business

Monday – Thursday	07:15 am – 12:00 pm	12:45 pm – 4:30 pm
Friday	07:15 am – 12:00 pm	12:45 pm – 3.00 pm

Our new website is online!

We look forward to presenting our new website to you.

The home page, which can be found at the usual web address **www.Mastertec.eu** has been technically and visually reworked so it is now more clearly laid out, incorporates many new features and includes an extended download area.



If you want to keep your customers abreast of waterproofing and lightning protection technology, the best way to do this is by linking this page to your home page.

Simply get in touch with our media department.

You can do this via email **marketing@Mastertec.eu** or by telephone

Tel. +49(0) 9503 5047-0.



We now also present our products on Germany's leading information platform **www.heinze.de**.

In addition to product information, you can also find tender specifications and dwg files here.

MASTERTEC PRODUCT RANGE

PRODUCT GROUP

Swelling tapes

1

- Bentonite swelling tapes
- Self-adhesive swelling tape
- High-pressure swelling tapes
- Swelling pastes
- Adhesives
- Grids

pages 5 – 20



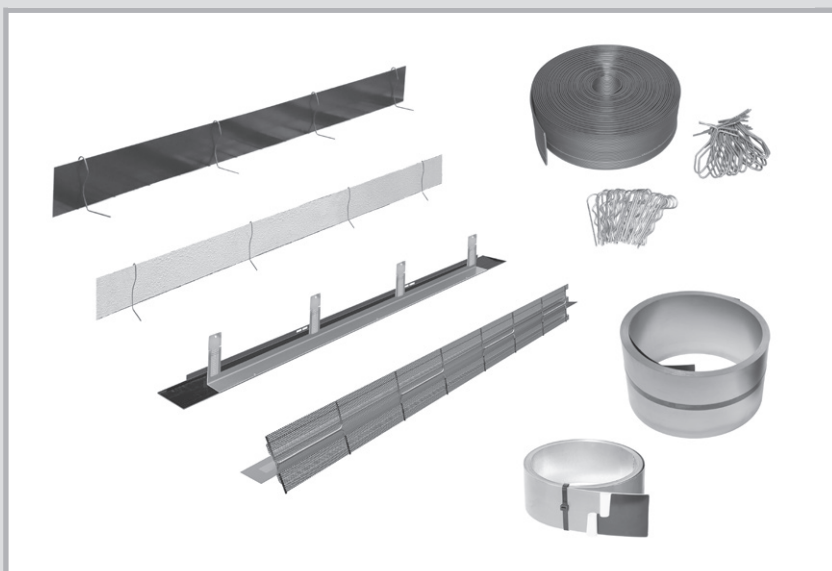
PRODUCT GROUP

Joint sheet metals

2

- Joint sheet metals
- Crack-inducing profiles
- Stopend panels
- Small coils
- Connectors
- Joint tapes

pages 21 – 50



PRODUCT GROUP

Injection hoses

3

Construction chemistry

- Structural waterproofing
- Injection hoses
- Accessories for injection hoses
- Injection packers
- Injection resins
- Concrete release agents

pages 51 – 71



MASTERTEC PRODUCT RANGE

PRODUCT GROUP

4

Pressure water-tight service ducts

- Sealing collars
- Lining pipes
- Pipe bushings
- Gasket inserts
- Sealing compound
- Pump sumps

pages 73 – 106



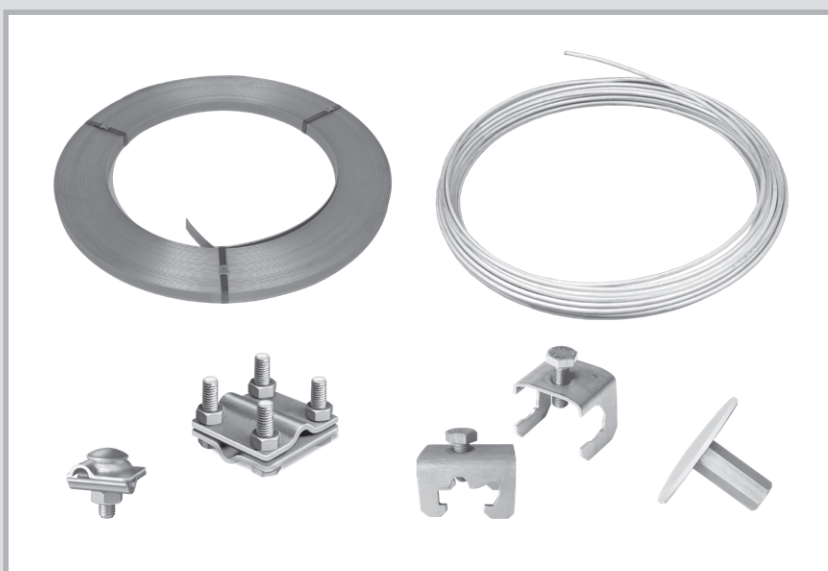
PRODUCT GROUP

5

Lightning protection

- Lightning protection conductors
- Connectors
- Connecting clamps
- Fixed earthing terminals
- Wall bushings
- Earth rods

pages 107 – 130



PRODUCT GROUP

6

Formwork accessories

- Sealing plugs
- Distance tube seals
- Damp proof courses
- Impact sound insulation/bearings
- Corrugated bearings
- Rib laths

pages 131 – 149



Product safety

Our products are certified by testing institutes for the various areas of application.



Dr. J. Kemski
Sachverständigenbüro
ö.b.u.v. Sachverständiger für Radon (IHK Bonn/Rhein-Sieg)

IAF - Radioökologie GmbH

Labor für Radionuklidanalytik
Radiologische Gutachten
Consulting



We are a member



Our pictograms

Testing of impermeability to pressurised water



Testing of fire resistance class to DIN EN 13501-2 and construction materials class to DIN EN 13501-1 and DIN 4102-1



Testing of resistance to various media



Standard sound level differential testing to DIN EN ISO 10140-2



Testing of impermeability to the naturally-occurring radioactive inert gas Radon



Additional tests that go beyond the requirements of the test principles.



Testing of the impact sound reduction based on DIN EN ISO 140-8



Testing of the lightning current carrying capacity class according to DIN EN 62561-1



Compliance with the European requirements for construction technology



Compliance with a European harmonised standard



You can find the technical notes for the relevant product here.



SWELLING TAPES



MASTERSTOP
Bentonite swelling tape
page 6



MASTERSTOP SK
Self-adhesive
bentonite swelling tape
page 7



FLOWSTOP
High-pressure swelling tape
page 7



Accessories for swelling tapes
pages 8 – 9

Swelling tapes

MASTERSTOP bentonite swelling tapes for the waterproofing of construction joints

Technical details pages 10 – 13



Art. no.	Description	PU	Secondary packaging	Weight	Price
010010	Size: 25 x 20 mm, colour: green Carton 30 m (6 rolls of 5 m each) Pressure-tight up to 50 m water column	1 carton	36 cartons per pallet	22.80 kg per carton	€10.70/m
010011	Size: 25 x 20 mm, colour: black Carton 30 m (6 rolls of 5 m each) Pressure-tight up to 50 m water column	1 carton	36 cartons per pallet	22.80 kg per carton	€10.70/m
010012	MASTERSTOP LONG TIME coated bentonite swelling tape Size: 25 x 20 mm, colour: black Carton 30 m (6 rolls of 5 m each) Pressure-tight up to 50 m water column	1 carton	36 cartons per pallet	23.00 kg per carton	€18.50/m
010020	Size: 20 x 15 mm, colour: green Carton 30 m (6 rolls of 5 m each) Pressure-tight up to 20 m water column	1 carton	36 cartons per pallet	14.30 kg per carton	€9.65/m

Art. no. 010010 + 010011



Art. no. 010012



Art. no. 010020



MASTERSTOP bentonite swelling tapes for subordinate waterproofing

Art. no.	Description	PU	Secondary packaging	Weight	Price
010016	Size: 15 x 10 mm, colour: green Carton 90 m (9 rolls of 10 m each)	1 carton	36 cartons per pallet	21.00 kg per carton	€8.30/m
010017	Size: 20 x 10 mm, colour: black Carton 54 m (9 rolls of 6 m each)	1 carton	36 cartons per pallet	19.00 kg per carton	€9.40/m

Art. no. 010016



Art. no. 010017




Swelling tapes



MASTERSTOP SK



Self-adhesive bentonite swelling tape [Technical details page 14](#)

Art. no.	Description	PU	Secondary packaging	Weight	Price
010025	Size: 20 x 5 mm, self-adhesive Carton 90 m (5 rolls of 18 m each) Pressure-tight up to 50 m water column	1 carton	36 cartons per pallet	16.00 kg per carton	€6.35/m



Sealing of a lining pipe with MASTERSTOP SK



FLOWSTOP

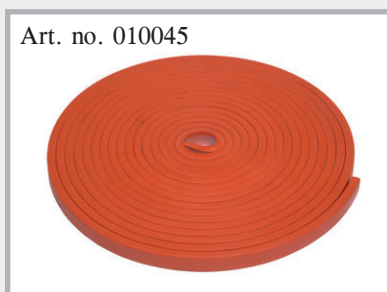
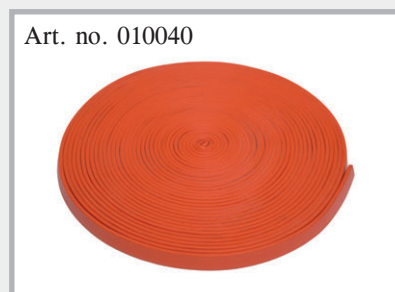


High-pressure TPE swelling tapes

for waterproofing of construction joints [Technical details pages 15 – 17](#)



Art. no.	Description	PU	Secondary packaging	Weight	Price
010040	Size 20 x 5 mm Carton 120 m (6 rolls of 20 m each)	1 carton	36 cartons per pallet	18.00 kg per carton	€8.05/m
010045	Size 20 x 10 mm Carton 60 m (6 rolls of 10 m each)	1 carton	36 cartons per pallet	17.00 kg per carton	€12.00/m

FLOWSTOP is fixed using POWER swelling tape adhesive.



Accessories for swelling tapes

Adhesives and swelling pastes Technical details pages 18 – 20

Art. no.	Description	PU	Secondary packaging	Weight	Price
010050	Swelling tape adhesive for bentonite swelling tapes Cartridge 310 ml Usage: 1 cartridge = approx. 7 m suitable for damp substrates	1 pc.	20 cartridges per carton	11.60 kg per carton	€13.60 per cartridge
010052	POWER swelling tape adhesive High-pressure adhesive, for MASTERSTOP and FLOWSTOP swelling tapes, cartridge 310 ml Usage: 1 cartridge = approx. 7 m suitable for damp substrates	1 pc.	20 cartridges per carton	10.00 kg per carton	€17.20 per cartridge
010030	MasterMastic PU swelling paste  Polyurethane-based swelling paste, for waterproofing of construction joints and wall penetrations, cartridge 310 ml Usage: Construction joint approx. 360 ml/m Usage: Wall penetration approx. 80-100 ml/m	1 pc.	12 cartridges per carton	5.90 kg per carton	€26.40 per cartridge
010033	MasterMastic PU swelling paste  Polyurethane-based swelling paste, for waterproofing of construction joints and wall penetrations, 600 ml, aluminium foil bag Usage: Construction joint approx. 360 ml/m Usage: Wall penetration approx. 80-100 ml/m	1 pc.	12 foil bags per carton	10.40 kg per carton	€44.00 per foil bag
010038	Injection gun for 310 ml cartridge , professional cartridge gun with aluminium casing, hardened coupling and push rod	1 pc.		0.90 kg per pc.	€43.80 per pc.
010039	Injection gun for 600 ml aluminium foil bag , incl. 3 nozzles, professional cartridge gun with ergonomic handle, hardened coupling and push rod, pipe and ring nuts made of aluminium	1 pc.		1.25 kg per pc.	€75.70 per pc.
010037	Nozzle for injection gun 600 ml	1 pc.		0.05 kg/pc.	€4.15/pc.

Art. no. 010050



Art. no. 010052



Art. no. 010030



Art. no. 010033



Art. no. 010038



Art. no. 010039



Art. no. 010037



Accessories for swelling tapes

Fastening grids

Art. no.	Description	PU	Secondary packaging	Weight	Price
010055	Swelling tape grid for 20/15 Carton 30 m (30 grids of 1 m each)	1 carton	160 cartons per pallet	1.95 kg per carton	€1.75/m
010060	Swelling tape grid for 25/20 Carton 30 m (30 grids of 1 m each)	1 carton	160 cartons per pallet	2.60 kg per carton	€1.80/m
010065	Swelling tape grid for MASTERSTOP LONG TIME 25/20 Carton 30 m (30 grids of 1 m each)	1 carton	160 cartons per pallet	4.90 kg per carton	€3.20/m



Fastening nails

Art. no.	Description	PU	Weight	Price
010080	Nails for bolt-firing tool Length: 42 mm with big washer	1 bag of 100 pcs.	0.90 kg per bag	€26.95 100 pcs.
010090	Nails for manual fastening Length: 40 mm with washer	1 carton of 250 pcs.	1.00 kg per carton	€17.90 100 pcs.



MASTERSTOP swelling tapes



- European Technical Assessment ETA
- General Building Supervisory Test Certificate



Product description

MASTERSTOP bentonite swelling tapes have a proven track record which goes back many years in construction practise. They swell upon contact with water and seal cracks or construction joints reliably and permanently. The test certificates confirm the product's suitability for various applications.

YouTube



The convincing advantages of MASTERSTOP bentonite swelling tapes

- Easy and secure installation
- No foundation curb
- Self-injecting effect
The swelling tapes penetrate cracks and cavities
- Environmentally friendly
- No fittings or welding
- Swelling and shrinking process is reversible
- Dimensionally stable and not sticky
- No cuttings or oddments
- Safety proved by extensive testing

Resistance of MASTERSTOP bentonite swelling tapes and MASTERSTOP SK

Medium	resistant	not resistant
Alkalis in general	✓	
Urea	✓	
Liquid manure/slurry	✓	
Biogas	✓	
Radon	✓	
De-icing salt	✓	
Substances obtained by means of fermentation	✓	
Substances obtained by means of composting	✓	
Waste water in water treatment plants	✓	
Petrol		X
Diesel		X
Heating oil		X

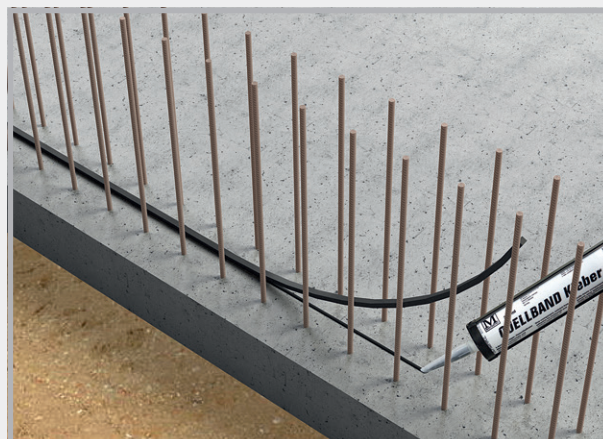
Further resistances are available on request.

Installation

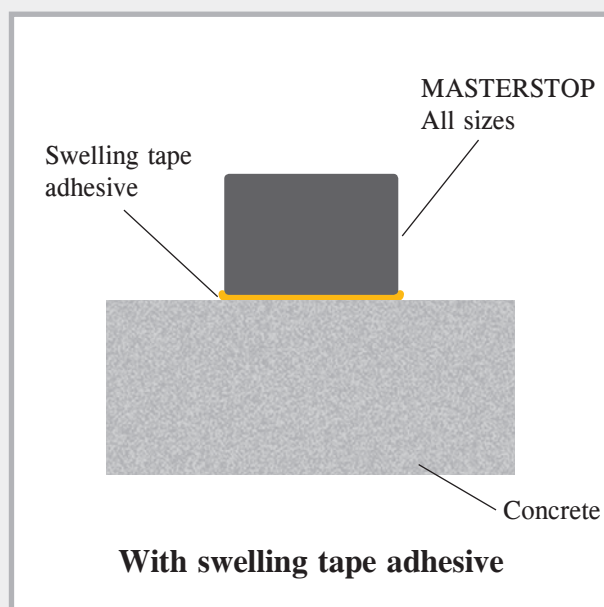
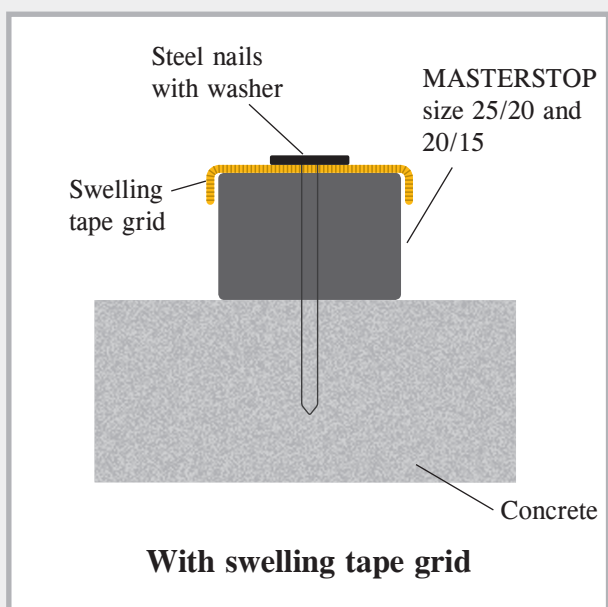
MASTERSTOP bentonite swelling tapes are fixed with a swelling tape grid or swelling tape adhesive. They are laid inside the reinforcement with a concrete cover of at least 8 cm.



Installation with fastening grid and nails

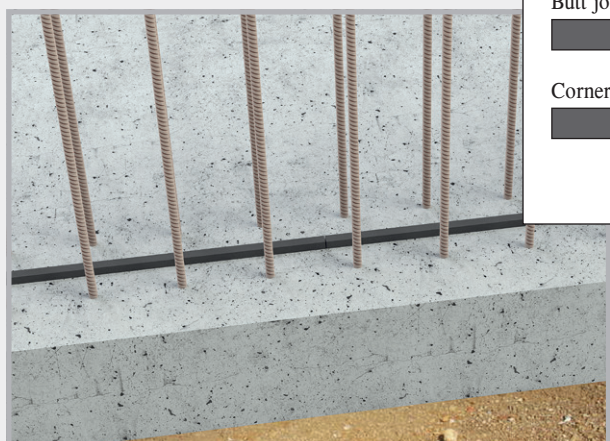


Installation with swelling tape adhesive

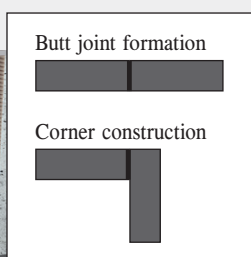


Installation of MASTERSTOP

Size 25/20 mm



Straight butt joint



Corner butt joint

MASTERSTOP LONG TIME

All-weather bentonite swelling tape

Product description and function

MASTERSTOP LONG TIME 25 x 20 mm is a coated bentonite swelling tape for the waterproofing of foundation/foundation, foundation/wall and wall/wall construction joints. MASTERSTOP LONG TIME is equipped with a protective film which enables installation in all kinds of weather.

The protective film ensures that the swelling tape can be exposed to rain and in-situ water for at least 10 days without expanding.

This changes when it is encased in concrete. The composition of the concrete causes the protective film to lose its effect after a few days so that the swelling tape is set free and seals the joints safely and permanently in case of water ingress.

The tape is not suitable for installation underwater or long-term immersion in water.

Safety

MASTERSTOP LONG TIME is not a hazardous substance and is uncomplicated to use and handle.

Storage

MASTERSTOP LONG TIME must be stored in a dry place and protected from contamination and mechanical damage. Swelling tapes which have already started expanding as well as swelling tapes with an altered geometry or damaged protective film must not be installed.



Rain protection **10 days**
Pressure-tight **50 m water column**



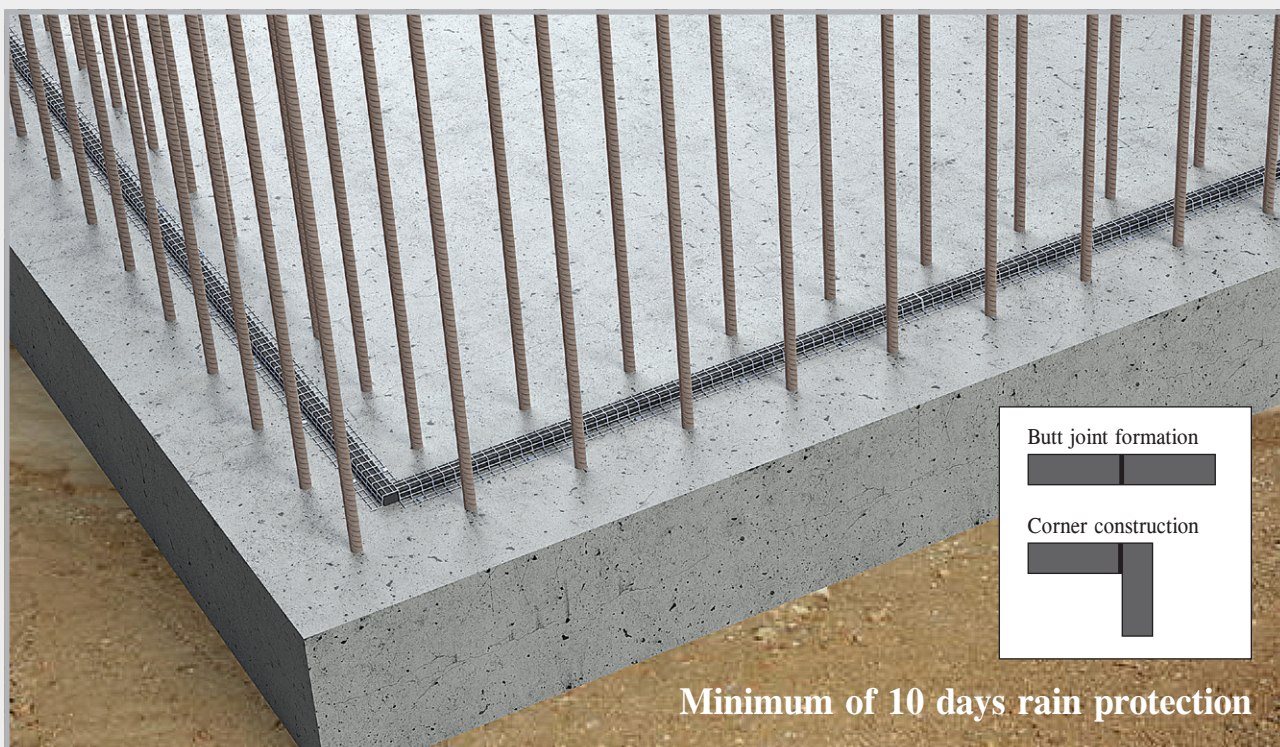
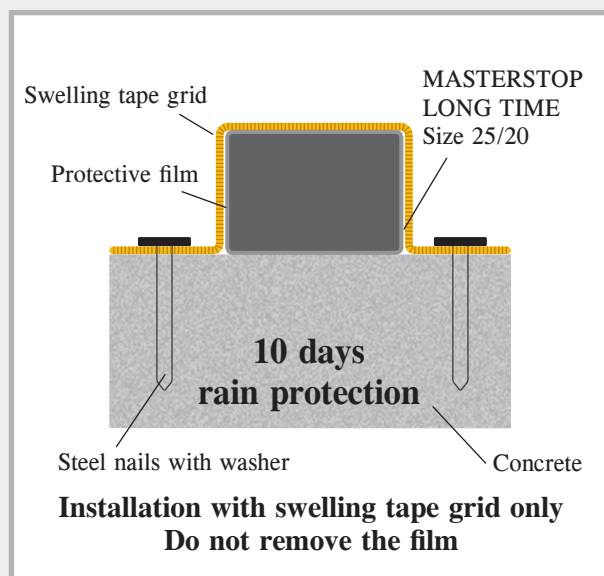
Comparison of swelling tape with and without protective film

The convincing advantages of MASTERSTOP LONG TIME

- All-weather installation
- No foundation curb
- Self-injecting effect
The swelling tapes penetrate cracks and cavities
- Environmentally friendly
- No fittings or welding
- Swelling and shrinking process is reversible
- Dimensionally stable and not sticky
- No cuttings or oddments
- Safety proved by extensive testing

Installation of LONG TIME

- MASTERSTOP LONG TIME is installed in the centre of the joint within the reinforcement.
- An adequate concrete cover of at least 8 cm must be ensured.
- The swelling tape cannot be glued and instead must be fixed to the substrate using a swelling tape grid. To ensure that the swelling tape lies flat on the concrete substrate, the grid usually needs to be fixed to the concrete using nails every 25 cm in the longitudinal direction. The distance between the nails can be reduced if necessary.
- Make sure that the protective film is not damaged.
- The tape ends are butt jointed. If tape sections are used, pull back the protective film, cut off approx. 5 cm of the swelling tape and turn down the film in order to prevent contact with water.
- The concrete substrate must be level and free of loose or separating particles and must not be excessively rough.



Installation of MASTERSTOP LONG TIME with swelling tape grid
8 cm concrete cover within reinforcement

MASTERSTOP SK

Self-adhesive bentonite swelling tape



Product description

MASTERSTOP SK is a self-adhesive bentonite swelling tape which expands on contact with water and prevents water penetration.

Testing

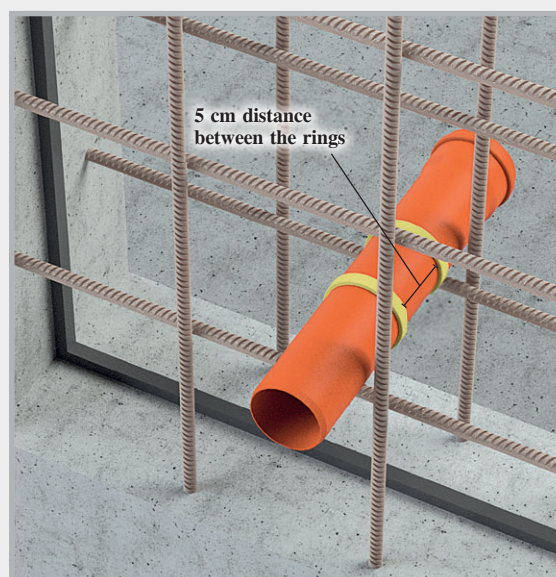
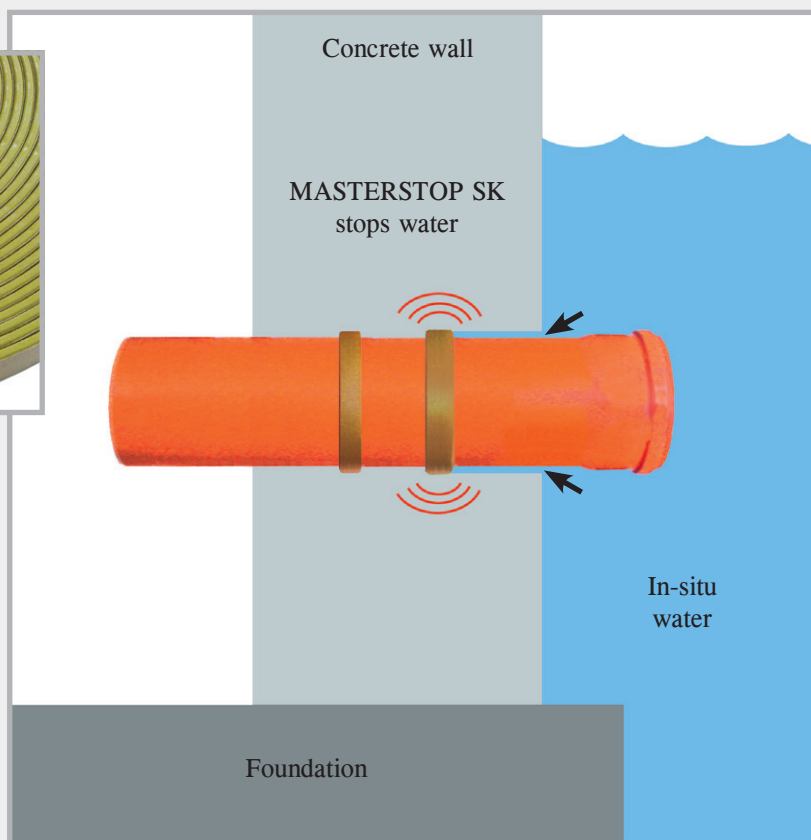
- Test report MFPA Leipzig, up to 50 m water column
- Environmentally friendly

Application

- Water-impermeable integration of pipe ducts in concrete buildings
- Waterproofing of reinforcement connections
- Waterproofing of ground drains

Installation

- Pull off silicone paper and affix 2 rings of MASTERSTOP SK around the pipe to be waterproofed.
- Butt joint ends, no overlaps
- The surface of the pipes must be rigid
- MASTERSTOP SK adheres to metal, plastic, PVC and stone.
- Secure MASTERSTOP SK with binding wire if necessary.



MASTERSTOP SK is affixed around the pipe inside the reinforcement with 6 cm concrete cover.

FLOWSTOP

High-pressure swelling tapes



For sealing construction joints and penetrations in concrete structures. With a proven ability to withstand a pressure of 8 bar, FLOWSTOP satisfies the conditions of the German WU directive on water-impermeable concrete structures for a continuous pressure of 2 bar, as well as international standards that require high pressure resistance.



- European Technical Assessment ETA
- General Building Supervisory Test Certificate
- Suitable for zones with frequently varying water levels
- Good chemical resistance
- Dimensionally stable
- Maximum pressure of 8 bar with size 20 x 5 mm
- Long-term testing for more than 250 days
- Easy installation with the POWER swelling tape adhesive
- No foundation curb required



Product description

FLOWSTOP is a high-pressure resistant swelling tape for construction joints and penetrations in concrete construction.

A reliable and permanent seal up to a water column of 80 m is achieved when using the size 20 x 5 mm.

Technical data

Chemical basis:	Modified TPE
Colour:	red
Surface:	smooth
Profiles:	20 x 5 mm 20 x 10 mm
Temperature range:	-30°C to +60°C
Storage:	Dry and protected

Resistance

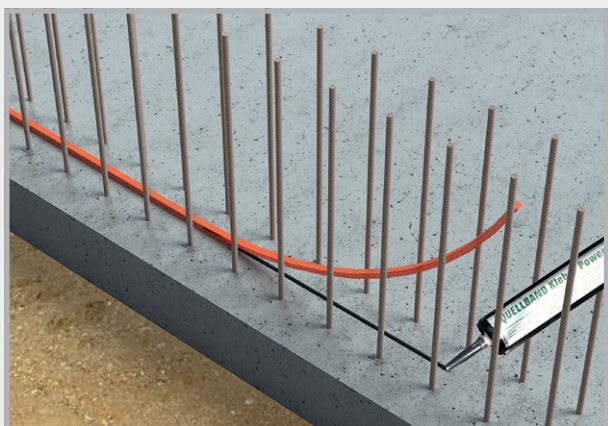
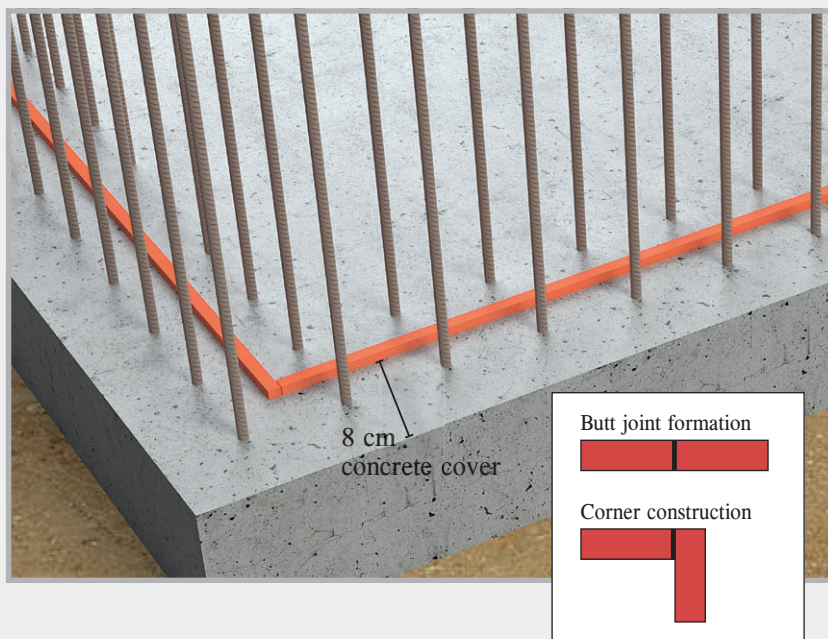
- Diluted acids and alkalis
- Salt water
- Methane gas + radon
- Liquid manure + slurry
- Fermentation mash + biogas
- Concrete alkalinity
- Liquid aggressive to concrete

Installation of FLOWSTOP

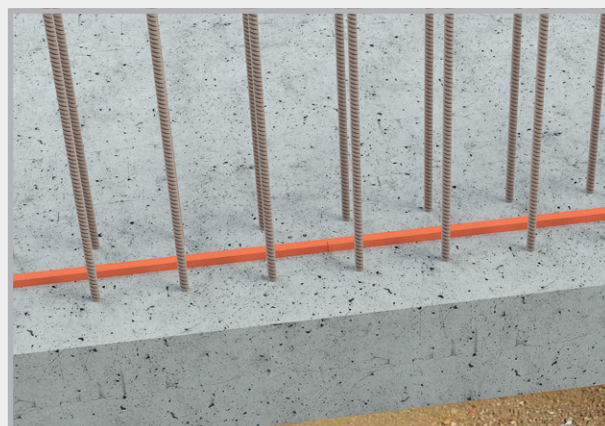
The substrate must be clean, dry and free of loose particles. Once the POWER swelling tape adhesive has been applied in the centre of the joint, the tape is placed on the adhesive and gently pressed in. A concrete cover of at least 8 cm inside the reinforcement must be ensured. Not suitable for installation with swelling tape grid.

Prior to concreting the tape must not lie in water for an extended period.

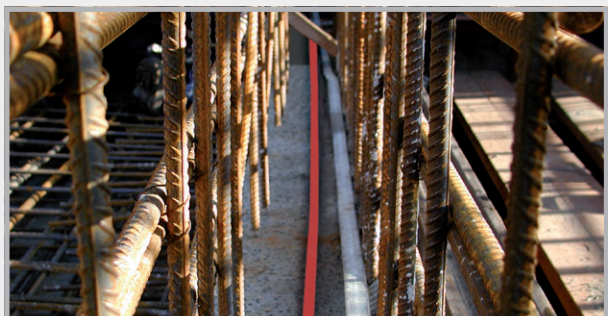
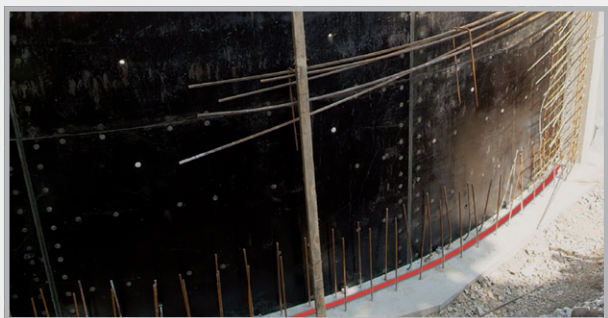
Rain water that runs off does not activate the swelling.



Apply the POWER swelling tape adhesive and roll the FLOWSTOP swelling tape in the adhesive.



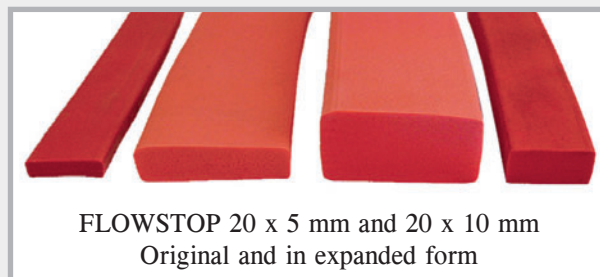
Sealing of a construction joint



Swelling behaviour

The swelling behaviour of FLOWSTOP was tested over 180 days through immersion in 4 test liquids.

Test liquid	Maximum expansion in all test cycles
Neutral liquid with pH value 7	600 %
Alkaline liquid with pH value 13	350 %
Liquid that is aggressive to concrete with pH value 4.5	200 %
Salt water	100 %



The final expansion was reached after 6 to 10 days, depending on the test liquid. These periods provide adequate time for secure installation.

FLOWSTOP test procedure

Water pressure [bar]	Test duration days	Water passage	Remarks
0.03	3	not measurable	Adjustment of the construction joint to 0.25 mm and water filling without pressure Water penetration from all sides, quickly reducing with increased swelling
0.2	1	0	Start of the first exposure to pressurised water
0.4	1	0	impermeable
0.6	1	0	impermeable
0.8	1	0	impermeable
1.0	3	0	impermeable
2.0	1	0	impermeable
3.0	1	0	impermeable
4.0	1	0	impermeable
5.0	14	0	impermeable
–	43	–	Six weeks of drying with hot air supply
0.03	3	0	Water filling without pressure, impermeable
0.2	1	0	Start of the second exposure to pressurised water, impermeable
0.4	1	0	impermeable
0.6	1	0	impermeable
0.8	1	0	impermeable

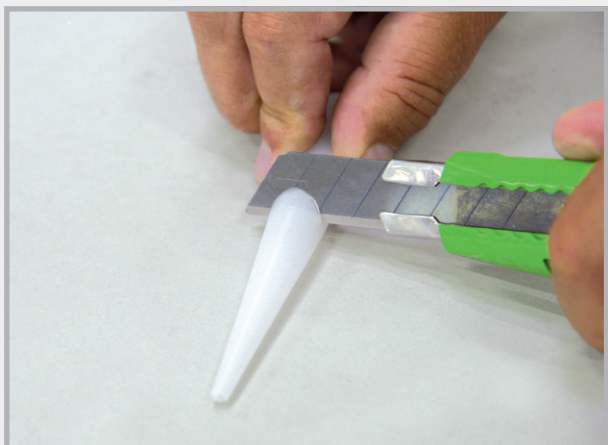
Water pressure [bar]	Test duration days	Water passage	Remarks
1.0	3	0	impermeable
2.0	1	0	impermeable
3.0	1	0	impermeable
4.0	1	0	impermeable
5.0	14	0	impermeable
–	43	–	Six weeks of drying with hot air supply
0.03	3	0	Water filling without pressure, impermeable
0.2	1	0	Start of the third exposure to pressurised water, impermeable
0.4	1	0	impermeable
0.6	1	0	impermeable
0.8	1	0	impermeable
1.0	3	0	impermeable
2.0	1	0	impermeable
3.0	1	0	impermeable
4.0	1	0	impermeable
5.0	14	0	impermeable
6.0	28	0	Additional pressure level, impermeable
7.0	28	0	Additional pressure level, impermeable
8.0	28	0	Additional pressure level, impermeable

Adhesives and swelling pastes

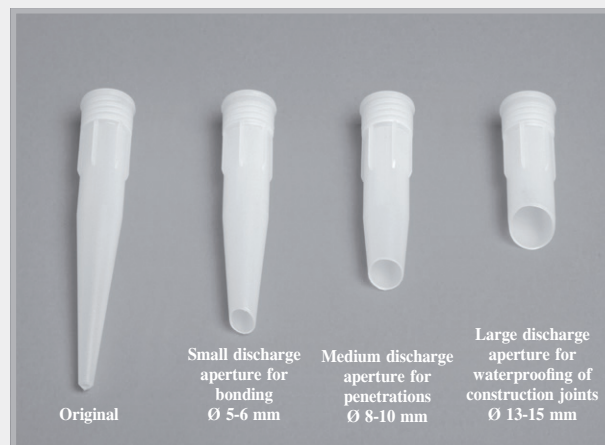
MASTERTEC produces adhesives for swelling tapes and swelling pastes for waterproofing various types and qualities of construction joints and wall penetrations.

Preparatory work

Cutting the cartridge tips

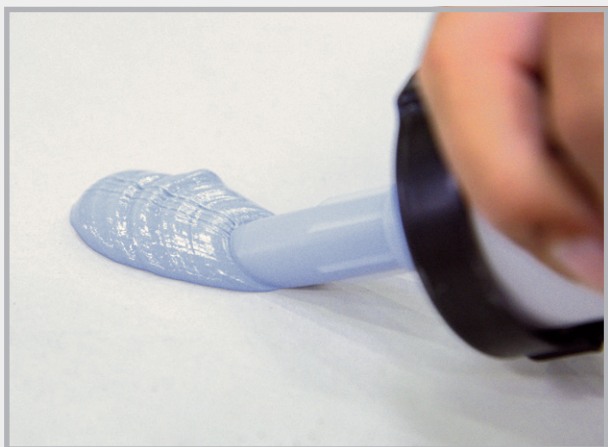


The nozzle is cut off to suit the various areas of application.

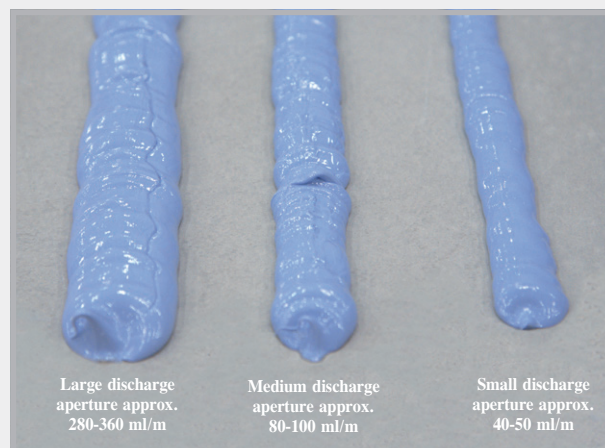


Cuts

Application of the adhesive or pastes



Example: Large discharge aperture
Usage approx. 280-360 ml/m



Adhesives and swelling pastes

Swelling tape adhesive

Single-component, solvent-free sealant for bonding of MASTERSTOP bentonite swelling tapes.

Usage:	40-50 ml/m \triangle approx. 7 m per cartridge
Application:	For dry and slightly moist substrates
Bonds with:	Concrete
Application temperature:	+5°C to +45°C
Thermal stability following curing:	-20°C to +70°C
Setting time:	approx. 8 hrs. at +20°C
Environmental aspects:	Once cured, the product is odourless and physiologically harmless.
Supplied as:	Cartridge 310 ml



Apply adhesive to clean substrate



Offer up the swelling tape

POWER swelling tape adhesive

Single-component, solvent-free sealant for bonding of MASTERSTOP and FLOWSTOP swelling tapes. The POWER version is a high-pressure adhesive.

Usage:	40-50 ml/m = approx. 7 m per cartridge
Application:	For dry and moist substrates
Bonds with:	Concrete, steel, rigid PVC, soft PVC, stone. Achieves a very high mechanical strength.
Application temperature:	+5°C to +45°C
Thermal stability following curing:	-30°C to +80°C
Setting time:	approx. 8 hrs. at +20°C
Environmental aspects:	Once cured, the product is odourless and physiologically harmless. Highly recommended environmentally compatible building product
Supplied as:	Cartridge 310 ml



Press the swelling tape into the adhesive bed



POWER high-pressure adhesive for MASTERSTOP and FLOWSTOP

 YouTube



MasterMastic PU swelling paste



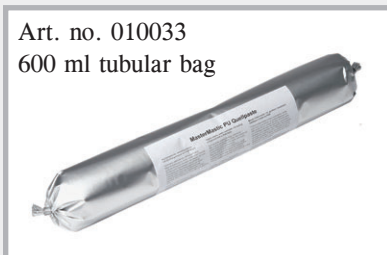
YouTube



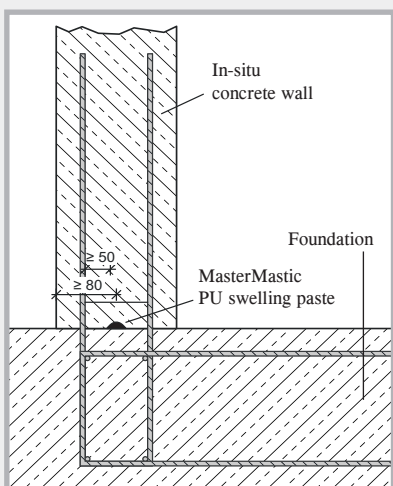
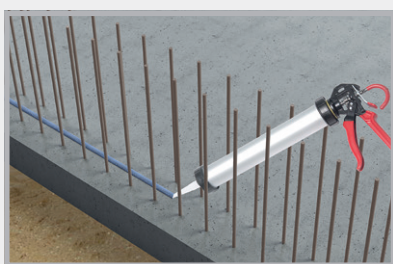
Single-component, swellable polyurethane paste, for waterproofing of wall penetrations and construction joints in water-impermeable concrete structures.

- For dry and moist substrates
- Solvent-free
- Application:
+5°C to +45°C
- Physiologically harmless
- Setting speed: approx.
6-7 mm/24 hrs.

Art. no. 010033
600 ml tubular bag



Art. no. 010030
310 ml cartridge



Wall penetrations

**Certified waterproofing up to 40 m water column
(test report MFPA Leipzig)**

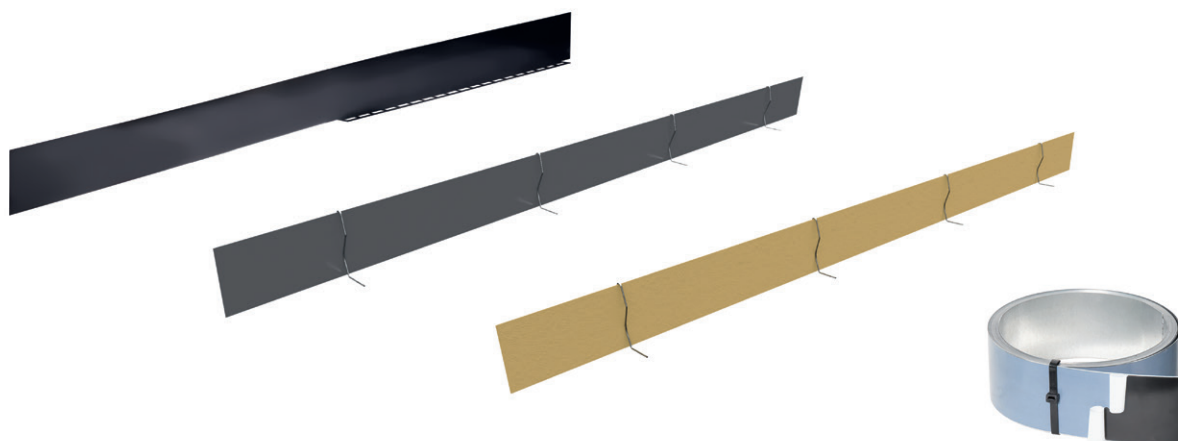
- Application: Circular Ø approx. 8-10 mm
- Usage: approx. 80-100 g/m
- Adheres to: Concrete, steel, stone, rigid PVC
Not suitable for polypropylene!
- Installation: Inside the reinforcement with a concrete cover of at least 8 cm.
To prevent premature swelling, protect against moisture and rain.

Construction joints

**General Building Supervisory Test Certificate according to
WU guideline up to 20 m water column**

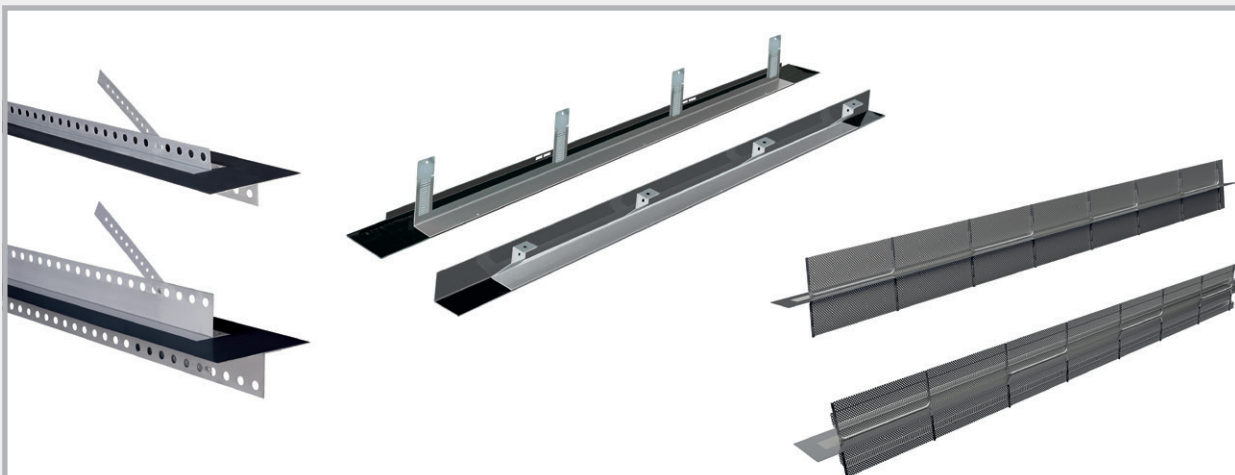
- Application: Bead approx. 35 x 12 mm
- Usage: approx. 380-420 g/m
- Adheres to: Dust-free, dry or matt damp concrete surfaces
- Installation: Inside the reinforcement with a concrete cover of at least 8 cm.
To prevent premature swelling, protect against moisture and rain.

JOINT SHEET METAL



Coated joint sheet metal

pages 22 – 24



Crack-inducing profiles, stopend panels + accessories

pages 25 – 31



Small coils, joint tapes, connectors + accessories

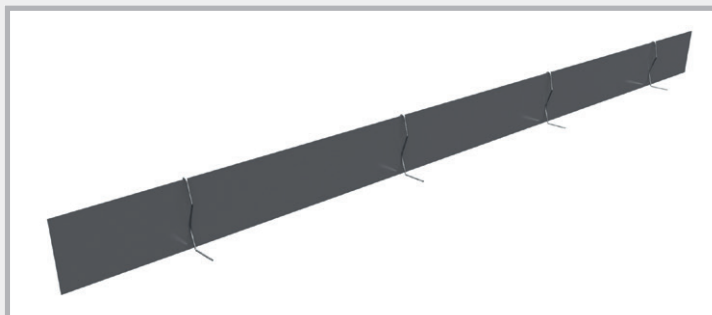
pages 32 – 34

Coated joint sheet metal

VB joint sheet metal high-pressure metal sheets

Joint sheet metals with reactive, bitumen-free polymer coating for sealing construction joints.

- Very high-pressure water tests
- Resistance tests
- All-weather installation
-20°C to +70°C



VB joint sheet metal strips in crates

Art. no.	Description	PU	Secondary packaging	Weight	Price
070450	VB joint sheet metal length 2.4 m, width 160 mm Crate 120 m (50 strips of 2.4 m each) fully coated on both sides incl. 55 fixing clips and 150 mounting brackets Technical details page 35	1 crate of 50 pcs. incl. fastening material	12 crates per pallet	130.00 kg per crate	€7.90/m Also optionally available with- out mounting brackets
070452	VB joint sheet metal length 2.0 m, width 160 mm Crate 100 m (50 strips of 2 m each) fully coated on both sides incl. 55 fixing clips and 150 mounting brackets Technical details page 35	1 crate of 50 pcs. incl. fastening material	12 crates per pallet	110.00 kg per crate	€7.90/m Also optionally available with- out mounting brackets
070455	Joint sheet metal 80 length 2.4 m, width 80 mm Crate 120 m (50 strips of 2.4 m each) fully coated on both sides incl. 55 fixing clips Technical details page 47	1 crate of 50 pcs. incl. fasten- ing material		74.00 kg per crate	€7.80/m

VB joint sheet metal strips in carton

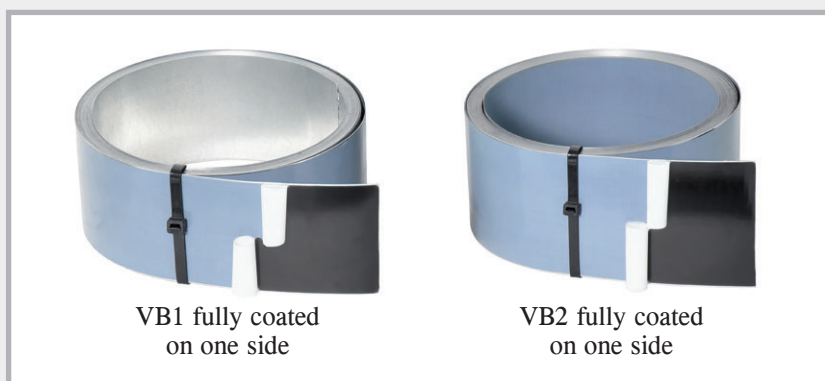


Art. no.	Description	PU	Secondary packaging	Weight	Price
070470	VB joint sheet metal length 2.0 m, width 160 mm Carton 30 m (15 strips of 2 m each) fully coated on both sides incl. 20 fixing clips and 40 mounting brackets Technical details page 35	1 carton of 15 pcs. incl. fastening material	32 cartons per pallet	30.50 kg per carton	€7.90/m
NEW! 070400	Joint sheet metal 80 length 2.4 m, width 80 mm Carton 60 m (25 strips of 2.4 m each) fully coated on both sides incl. 30 fixing clips Technical details page 47	1 carton of 25 pcs. incl. fastening material	32 cartons per pallet	28.00 kg per carton	€7.80/m

VB joint sheet metal roll



The packaging in rolls minimises joints and therefore increases the installation reliability.



Art. no.	Description	PU	Secondary packaging	Weight	Price
070461	Joint sheet metal roll 160 VB2 Joint sheet metal fully coated on both sides width 160 mm, roll length 20 m incl. 30 mounting brackets and 2 fixing clips Technical details page 35	1 roll per carton incl. fastening material	36 cartons per pallet	21.00 kg per carton	€8.00/m
070460	Joint sheet metal roll 160 VB1 Joint sheet metal fully coated on one side width 160 mm, roll length 20 m incl. 30 mounting brackets and 2 fixing clips Technical details page 35	1 roll per carton incl. fastening material	36 cartons per pallet	19.00 kg per carton	€7.30/m
070463	Joint sheet metal roll 120 VB1 Joint sheet metal fully coated on one side width 120 mm, roll length 20 m incl. 30 mounting brackets and 2 fixing clips Technical details page 35	1 roll per carton incl. fastening material	48 cartons per pallet	15.00 kg per carton	€6.65/m
070462	Joint sheet metal roll 240 VB2 Joint sheet metal fully coated on both sides width 240 mm, roll length 20 m incl. 30 mounting brackets and 4 fixing clips Technical details page 35	1 roll per carton incl. fastening material	24 cartons per pallet	31.00 kg per carton	€12.70/m

Packaging



Pallet containing VB joint sheet metal strips in crates



Pallet containing VB joint sheet metal or 80 joint sheet metal supplied in strips in cartons

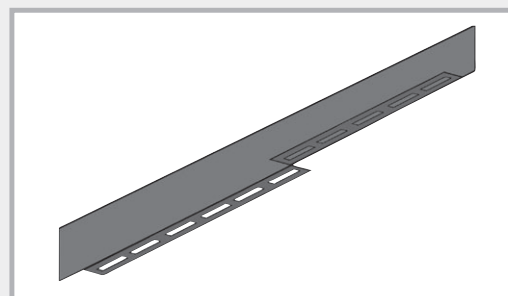


Pallet containing VB joint sheet metal rolls in cartons

Mounting brackets and fixing clips are included in the scope of supply.

Coated joint sheet metal

MASTER joint sheet metal



The joint sheet metal with support rail

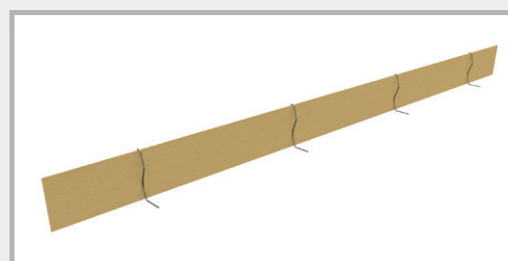
Art. no.	Description	PU	Secondary packaging	Weight	Price
070200	MASTER joint sheet metal length 2.5 m, width 160 mm fully coated sealing element with support rail, 20 mm perforated Technical details pages 36 – 37	1 crate of 40 pcs.	12 crates per pallet	155.00 kg per crate	€8.55/m

MB joint sheet metal



Mineral-coated joint sheet metals for waterproofing of construction joints.

- Water pressure test
- Resistance test
- All-weather installation -20°C to +70°C



Art. no.	Description	PU	Secondary packaging	Weight	Price
070482	Joint sheet metal MB 160, overlap type with full mineral coating on both sides length 2.4 m, width 160 mm incl. 150 mounting brackets 55 fixing clips Technical details page 38	1 crate of 50 pcs. incl. fastening material	12 crates per pallet	135.00 kg per crate	€7.60/m
070486	Joint sheet metal MB 120, overlap type with full mineral coating on both sides length 2.4 m, width 120 mm incl. 150 mounting brackets 55 fixing clips Technical details page 38	1 crate of 50 pcs. incl. fastening material	12 crates per pallet	100.00 kg per crate	€7.35/m

AKTIV joint sheet metal



The active, bentonite-coated joint sheet metal

Art. no.	Description	PU	Secondary packaging	Weight	Price
070490	Joint sheet metal AKTIV, fully coated on one side with bentonite width 160 mm, roll length 10 m incl. 20 mounting brackets, 4 fixing clips + 1.5 m adhesive tape Technical details page 39	1 roll per carton incl. fastening material	36 cartons per pallet	15.00 kg per carton	€12.70/m

Crack-inducing profiles

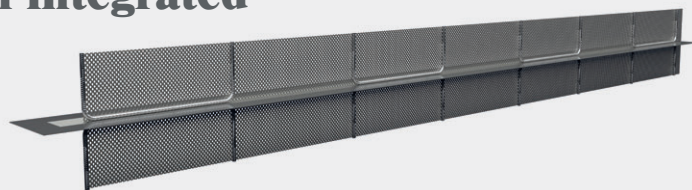
Art. no.	Description	PU	Secondary packaging	Weight	Price
070250	 MASTER joint sheet metal SFG Length: 2.5 m Incl. 5 nail plugs 5/50 and 4 fixing clips, adjustable brackets Extension at the construction site possible Wall thicknesses up to 40 cm Technical details pages 40 – 42 	1 pc.	88 pcs. per pallet	4.80 kg per pc.	€28.90/m
070260	 MASTER joint sheet metal SFE Length: 2.5 m Incl. 5 nail plugs 5/50 and 4 fixing clips, adjustable brackets Extension at the construction site possible Wall thicknesses up to 40 cm Technical details pages 40 – 42 	1 pc.	80 pcs. per pallet	4.80 kg per pc.	€30.45/m
070263	 MASTER joint sheet metal FE Length: 2.5 m Incl. 5 nail plugs 5/50 and 4 fixing clips, adjustable brackets Extension at the construction site possible Wall thicknesses up to 40 cm Technical details pages 40 – 42 	1 pc.	72 pcs. per pallet	5.00 kg per pc.	€30.45/m
070278	 SRF 125 Multi Cavity wall type Coated crack-inducing profile incl. 2 fixing clips, with perforated support rail and perforated foldable retaining plates Type for cavity walls Wall thicknesses up to 40 cm Technical details page 43   	1 pc.	120 pcs. per pallet	4.60 kg per pc.	€26.70/m
070280	 SRF 125 Multi In-situ concrete wall type Coated crack-inducing profile incl. 2 fixing clips, with perforated support rail and perforated foldable retaining plates Type for in-situ concrete walls Wall thicknesses up to 36.5 cm Technical details page 43   	1 pc.	120 pcs. per pallet	5.40 kg per pc.	€27.25/m

Stopend panels ABS

Rough or toothed joint with integrated coated joint sheet metal



ABS rough



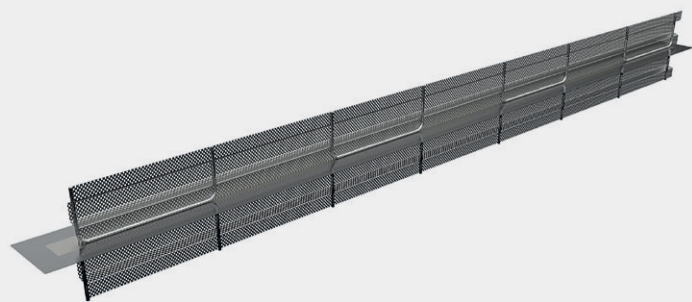
Art. no.	Description	Installation dimension E = width of perforated plate	Length	PU	Weight per pc.	Price
070281	ABS 130 rough	Perforated plate 130 mm	2.50 m	1 pc.	4.80 kg	€33.85/m
070282	ABS 160 rough	Perforated plate 160 mm	2.50 m	1 pc.	6.00 kg	€34.95/m
070284	ABS 200 rough	Perforated plate 200 mm	2.50 m	1 pc.	6.50 kg	€35.55/m
070287	ABS 250 rough	Perforated plate 250 mm	2.50 m	1 pc.	8.00 kg	€42.35/m
070289	ABS 300 rough	Perforated plate 300 mm	2.50 m	1 pc.	8.40 kg	€48.70/m
070291	ABS 400 rough	Perforated plate 400 mm	2.50 m	1 pc.	9.90 kg	€51.90/m
070293	ABS 500 rough	Perforated plate 500 mm	2.50 m	1 pc.	10.60 kg	€57.20/m
070295	ABS 600 rough	Perforated plate 600 mm	2.50 m	1 pc.	11.00 kg	€62.50/m
070297	ABS 700 rough	Perforated plate 700 mm	2.50 m	1 pc.	13.00 kg	€65.70/m
070299	ABS 800 rough	Perforated plate 800 mm	2.50 m	1 pc.	14.00 kg	€67.80/m
070301	ABS 900 rough	Perforated plate 900 mm	2.50 m	1 pc.	15.00 kg	€69.95/m
070303	ABS 1000 rough	Perforated plate 1000 mm	2.50 m	1 pc.	16.00 kg	€73.10/m

Technical details pages 44 – 45

All intermediate sizes are available at short notice

ABS toothed

according to DIN EN 1045-1/EC2



Art. no.	Description	Installation dimension E = width of perforated plate	Length	PU	Weight per pc.	Price
070362	ABS 160 toothed	Perforated plate 160 mm	2.50 m	1 pc.	6.00 kg	€37.25/m
070364	ABS 200 toothed	Perforated plate 200 mm	2.50 m	1 pc.	6.50 kg	€38.40/m
070366	ABS 250 toothed	Perforated plate 250 mm	2.50 m	1 pc.	7.50 kg	€44.40/m
070368	ABS 300 toothed	Perforated plate 300 mm	2.50 m	1 pc.	8.00 kg	€51.90/m
070370	ABS 400 toothed	Perforated plate 400 mm	2.50 m	1 pc.	9.20 kg	€53.60/m
070372	ABS 500 toothed	Perforated plate 500 mm	2.50 m	1 pc.	10.10 kg	€59.10/m
070374	ABS 600 toothed	Perforated plate 600 mm	2.50 m	1 pc.	11.20 kg	€63.95/m
070376	ABS 700 toothed	Perforated plate 700 mm	2.50 m	1 pc.	13.20 kg	€68.75/m
070378	ABS 800 toothed	Perforated plate 800 mm	2.50 m	1 pc.	14.00 kg	€72.25/m
070380	ABS 900 toothed	Perforated plate 900 mm	2.50 m	1 pc.	15.30 kg	€76.95/m
070382	ABS 1000 toothed	Perforated plate 1000 mm	2.50 m	1 pc.	16.50 kg	€80.45/m

Technical details pages 44 – 45

All intermediate sizes are available at short notice

The scope of supply includes 2 fixing clips per pc.

ABS deflection profiles

ABS deflection profiles for rough stopend panels

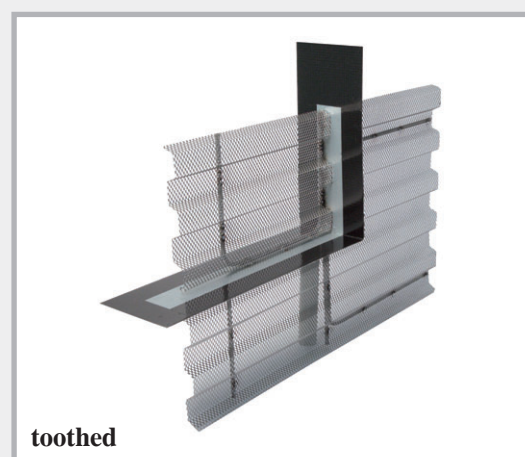
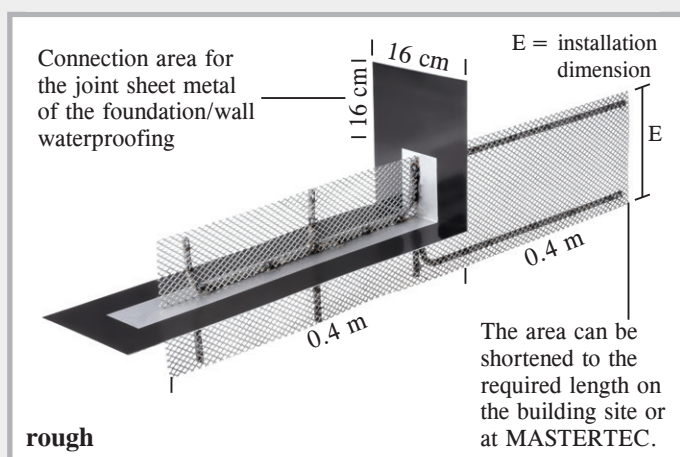
Art. no.	Description	Installation dimension E = width of perforated plate	PU	Weight per pc.	Price
070330	UL 130 rough	Perforated plate 130 mm	1 pc.	1.70 kg	€94.70/pc.
070333	UL 160 rough	Perforated plate 160 mm	1 pc.	1.80 kg	€96.45/pc.
070336	UL 200 rough	Perforated plate 200 mm	1 pc.	1.90 kg	€97.35/pc.
070339	UL 250 rough	Perforated plate 250 mm	1 pc.	2.00 kg	€98.70/pc.
070342	UL 300 rough	Perforated plate 300 mm	1 pc.	2.40 kg	€99.85/pc.
070345	UL 400 rough	Perforated plate 400 mm	1 pc.	2.80 kg	€101.55/pc.
070347	UL 500 rough	Perforated plate 500 mm	1 pc.	3.30 kg	€108.95/pc.
070349	UL 600 rough	Perforated plate 600 mm	1 pc.	3.70 kg	€113.70/pc.
070351	UL 700 rough	Perforated plate 700 mm	1 pc.	4.20 kg	€120.70/pc.
070353	UL 800 rough	Perforated plate 800 mm	1 pc.	4.50 kg	€127.85/pc.
070355	UL 900 rough	Perforated plate 900 mm	1 pc.	5.00 kg	€136.20/pc.
070357	UL 1000 rough	Perforated plate 1000 mm	1 pc.	5.60 kg	€145.70/pc.

Further widths are available on request – intermediate sizes available

ABS deflection profiles for toothed stopend panels

Art. no.	Description	Installation dimension E = width of perforated plate	PU	Weight per pc.	Price
070387	UL 160 toothed	Perforated plate 160 mm	1 pc.	1.60 kg	€106.10/pc.
070389	UL 200 toothed	Perforated plate 200 mm	1 pc.	1.80 kg	€107.10/pc.
070391	UL 250 toothed	Perforated plate 250 mm	1 pc.	1.90 kg	€108.60/pc.
070393	UL 300 toothed	Perforated plate 300 mm	1 pc.	2.30 kg	€109.85/pc.
070395	UL 400 toothed	Perforated plate 400 mm	1 pc.	2.60 kg	€111.75/pc.
070397	UL 500 toothed	Perforated plate 500 mm	1 pc.	3.00 kg	€119.95/pc.
070399	UL 600 toothed	Perforated plate 600 mm	1 pc.	3.50 kg	€125.10/pc.
070401	UL 700 toothed	Perforated plate 700 mm	1 pc.	4.00 kg	€132.75/pc.
070403	UL 800 toothed	Perforated plate 800 mm	1 pc.	4.30 kg	€140.70/pc.
070405	UL 900 toothed	Perforated plate 900 mm	1 pc.	4.60 kg	€149.90/pc.
070407	UL 1000 toothed	Perforated plate 1000 mm	1 pc.	5.00 kg	€160.35/pc.

Further widths are available on request – intermediate sizes available

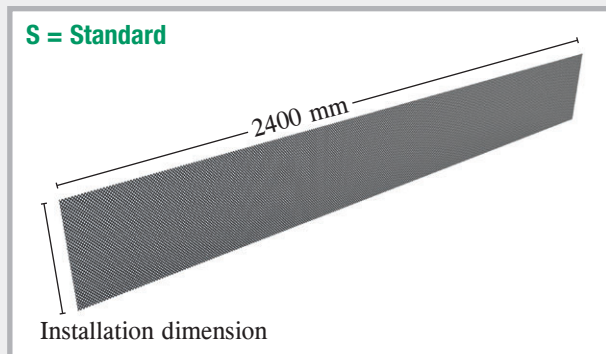


ABS deflection profiles

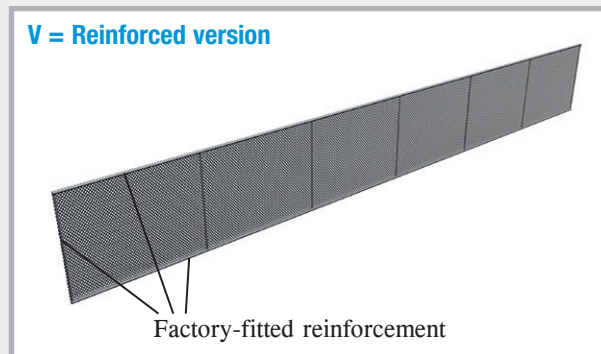
For a pressure water-tight transition from the foundation shuttering to the wall. We require the installation dimension E, which is the measurement between the reinforcement.

LinkForm stopend panels

NEW! Lost formwork for construction joints
in the rough joint category according to Eurocode 2,
prefabricated ready for installation



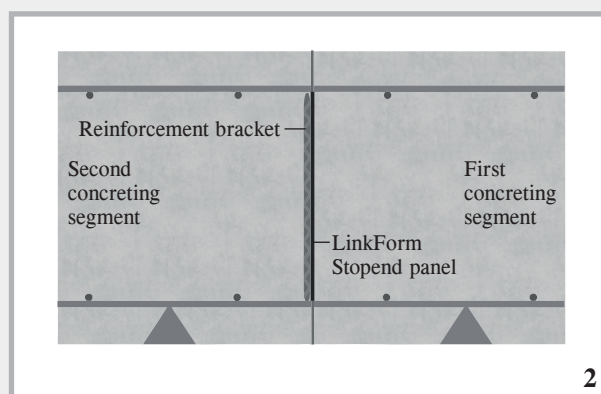
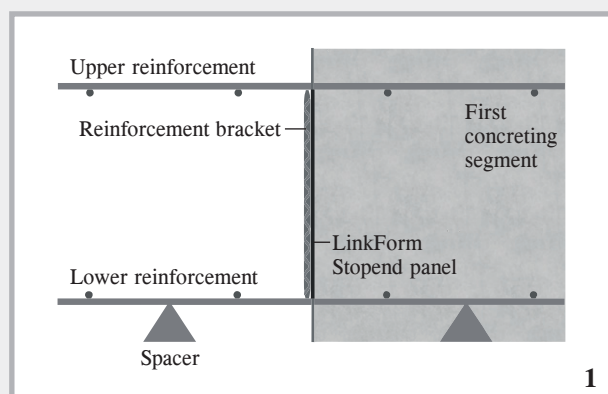
LinkForm rough stopend panels – standard



LinkForm rough stopend panels – reinforced

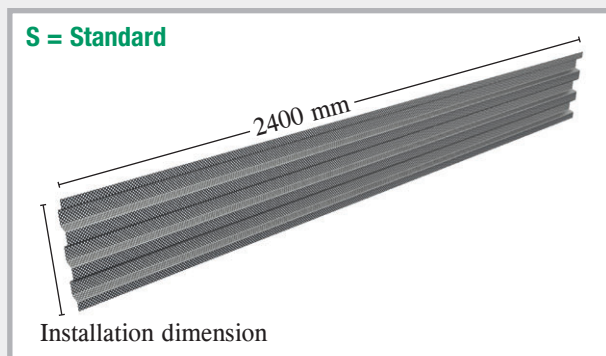
Description	Installation dimension	Length	PU	Art. no.	S = Standard		Art. no.	V = Reinforced version	
					Weight	Price		Weight	Price
LinkForm 130 rough S / V	130 mm	2.4 m	1 pc.	070500	0.81 kg per pc.	€7.15/m €17.16/pc.	070530	2.91 kg per pc.	€17.05/m €40.92/pc.
LinkForm 160 rough S / V	160 mm	2.4 m	1 pc.	070502	1.00 kg per pc.	€7.50/m €18.00/pc.	070532	3.14 kg per pc.	€18.15/m €43.56/pc.
LinkForm 200 rough S / V	200 mm	2.4 m	1 pc.	070504	1.25 kg per pc.	€7.85/m €18.84/pc.	070534	3.45 kg per pc.	€18.90/m €45.36/pc.
LinkForm 250 rough S / V	250 mm	2.4 m	1 pc.	070506	1.56 kg per pc.	€8.25/m €19.80/pc.	070536	3.84 kg per pc.	€19.70/m €47.28/pc.
LinkForm 300 rough S / V	300 mm	2.4 m	1 pc.	070508	1.87 kg per pc.	€8.65/m €20.76/pc.	070538	4.23 kg per pc.	€20.35/m €48.84/pc.
LinkForm 400 rough S / V	400 mm	2.4 m	1 pc.	070512	2.50 kg per pc.	€9.40/m €22.56/pc.	070540	5.00 kg per pc.	€21.15/m €50.76/pc.
LinkForm 500 rough S / V	500 mm	2.4 m	1 pc.	070514	3.12 kg per pc.	€10.15/m €24.36/pc.	070544	5.78 kg per pc.	€24.20/m €58.08/pc.
LinkForm 600 rough S / V	600 mm	2.4 m	1 pc.	070516	3.74 kg per pc.	€10.90/m €26.16/pc.	070546	6.55 kg per pc.	€25.20/m €60.48/pc.
LinkForm 700 rough S / V	700 mm	2.4 m	1 pc.	070518	4.37 kg per pc.	€11.70/m €28.08/pc.	070548	7.33 kg per pc.	€27.20/m €65.28/pc.
LinkForm 800 rough V	800 mm	2.4 m	1 pc.				070550	8.11 kg per pc.	€30.80/m €73.92/pc.

All intermediate sizes are available at short notice

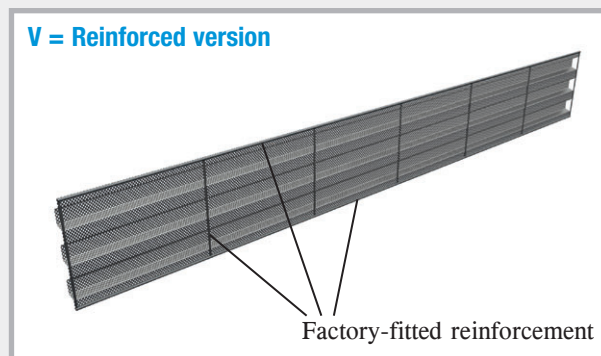


LinkFix stopend panels

NEW! Lost formwork for construction joints in the toothed joint category according to Eurocode 2, prefabricated ready for installation



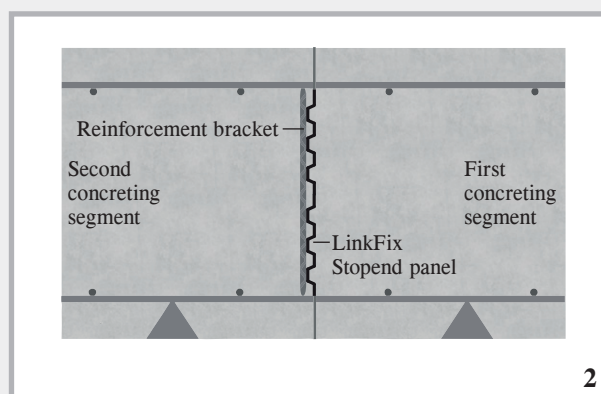
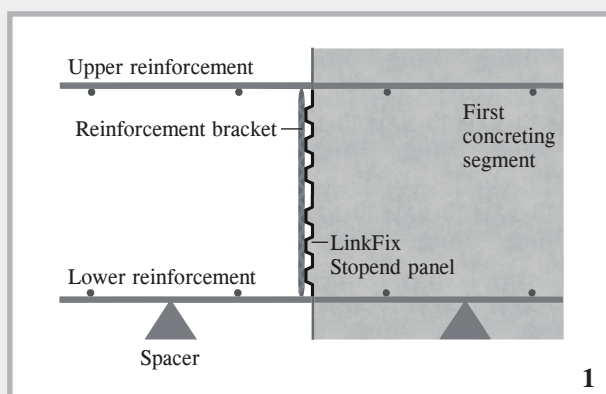
LinkFix toothed stopend panels – standard



LinkFix toothed stopend panels – reinforced

Description	Installation dimension	Length	PU	Art. no.	S = Standard		Art. no.	V = Reinforced version	
					Weight	Price		Weight	Price
LinkFix 130 toothed S / V	130 mm	2.4 m	1 pc.	070556	0.66 kg per pc.	€9.95/m €23.88/pc.	070576	2.75 kg per pc.	€18.10/m €43.44/pc.
LinkFix 160 toothed S / V	160 mm	2.4 m	1 pc.	070558	0.81 kg per pc.	€10.45/m €25.08/pc.	070578	2.95 kg per pc.	€19.00/m €45.60/pc.
LinkFix 200 toothed S / V	200 mm	2.4 m	1 pc.	070560	1.01 kg per pc.	€11.00/m €26.40/pc.	070580	3.21 kg per pc.	€20.00/m €48.00/pc.
LinkFix 250 toothed S / V	250 mm	2.4 m	1 pc.	070562	1.26 kg per pc.	€11.55/m €27.72/pc.	070582	3.54 kg per pc.	€21.00/m €50.40/pc.
LinkFix 300 toothed S / V	300 mm	2.4 m	1 pc.	070564	1.51 kg per pc.	€12.05/m €28.92/pc.	070584	3.87 kg per pc.	€21.90/m €52.56/pc.
LinkFix 400 toothed S / V	400 mm	2.4 m	1 pc.	070566	2.02 kg per pc.	€13.15/m €31.56/pc.	070586	4.52 kg per pc.	€23.90/m €57.36/pc.
LinkFix 500 toothed S / V	500 mm	2.4 m	1 pc.	070568	2.52 kg per pc.	€14.20/m €34.08/pc.	070588	5.18 kg per pc.	€25.80/m €61.92/pc.
LinkFix 600 toothed S / V	600 mm	2.4 m	1 pc.	070570	3.02 kg per pc.	€15.25/m €36.60/pc.	070590	5.83 kg per pc.	€27.75/m €66.60/pc.
LinkFix 700 toothed S / V	700 mm	2.4 m	1 pc.	070572	3.53 kg per pc.	€16.35/m €39.24/pc.	070592	6.49 kg per pc.	€29.70/m €71.28/pc.
LinkFix 800 toothed V	800 mm	2.4 m	1 pc.				070594	7.15 kg per pc.	€33.95/m €81.48/pc.

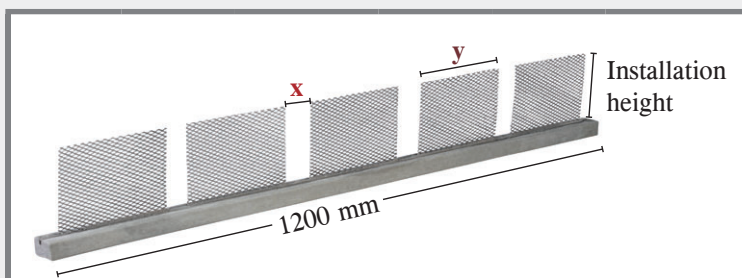
All intermediate sizes are available at short notice



ABS spacer

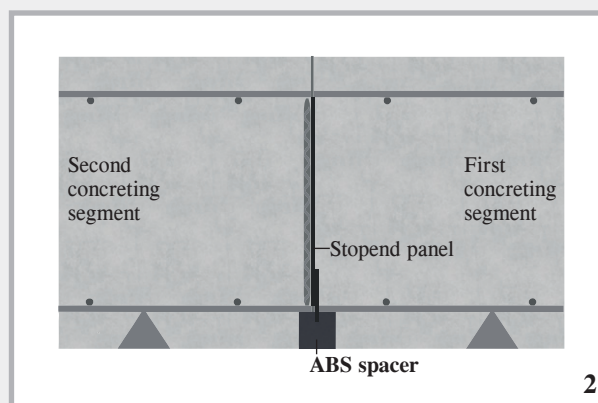
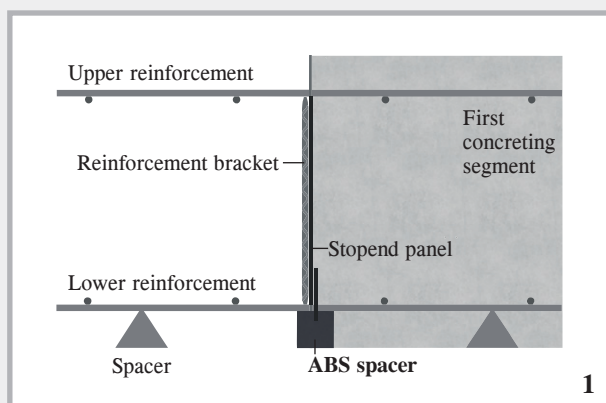
NEW! Fibre cement square spacer with integrated rib lath

The location of the ABS spacer below the longitudinal direction of stopend panels minimises the discharge of concrete below and in the area of the lower reinforcement layer.



Description	Length	PU	Installation height 120			Installation height 150		
			Art. no.	Weight	Price	Art. no.	Weight	Price
ABS spacer 35 mm concrete cover Installation height 120/150-x-y	1.2 m	1 pc.	070630	3.20 kg per pc.	€15.40 per pc.	070636	3.40 kg per pc.	€15.40 per pc.
ABS spacer 40 mm concrete cover Installation height 120/150-x-y	1.2 m	1 pc.	070632	4.20 kg per pc.	€17.60 per pc.	070638	4.40 kg per pc.	€17.60 per pc.
ABS spacer 50 mm concrete cover Installation height 120/150-x-y	1.2 m	1 pc.	070634	6.50 kg per pc.	€22.00 per pc.	070640	6.70 kg per pc.	€22.00 per pc.

To adapt the ABS spacers perfectly to your installation situation, we need, in addition to the installation height, the reinforcement width **x** and the formwork width **y**.



Accessories for coated joint sheet metals

Art. no.	Description	PU	Weight	Price
070266	Soundproofing joint element length 2.5 m DSK 24/25 for wall thickness 24 + 25 cm DSK 30 for wall thickness 30 cm DSK 35/36.5 for wall thickness 35 + 36.5 cm 1 soundproofing joint consists of 2 elements	1 element = 2.5 m	2.40 kg/m	€64.00/m
070267		1 element = 2.5 m	2.80 kg/m	€64.00/m
070268		1 element = 2.5 m	3.20 kg/m	€68.00/m
				
		Total price for 2 elements with 2.5 m length		
		DSK 24/25	DSK 30	DSK 35/36.5
			€160.00	€160.00
			€170.00	
Technical details page 46				
070269	Sound joint tape DSF Internal A24 construction joint tape according to DIN 18541, specially coated up to 15 cm on one side, compatible with bitumen, roll length 3 m	1 roll	4.20 kg per roll	€23.35/m
Technical details page 46				
070230	Joint sheet metal/joint tape connector transition from joint sheet metal to joint tape	1 set = 2 pcs.	2.50 kg per set	€48.70 per set
Technical details page 47				
070240	MASTER adhesive tape for joint sheet metal Adhesive tape for securing joints and crossing points, thickness 1.5 mm, roll length 10 m, width 38 mm	1 carton of 16 pcs.	0.90 kg per roll	€20.70 per roll
070270	MASTER joint sheet metal angle 90° side length 25 x 25 cm, with fixing rail	1 pc.	0.60 kg per pc.	€16.90 per pc.
070273	MASTER joint sheet metal corner element FB with fixing rail	1 pc.	0.70 kg per pc.	€17.20 per pc.
070224	VB joint sheet metal corner element FB	1 pc.	0.45 kg per pc.	€15.50 per pc.
070275	Joint sheet metal VB angle 90° side length 25 x 25 cm height 160 mm	1 pc.	0.45 kg per pc.	€11.60 per pc.
070415 070421 070422	Mounting bracket for joint sheet metals up to height 160 mm height 161-205 mm height 206-330 mm	150 pcs./sack 150 pcs./sack 150 pcs./sack	per sack 7.50 kg 8.60 kg 13.00 kg	€0.75/pc. €0.79/pc. €0.89/pc.
070410	Fixing clip for securing the element joints	1 bag of 55 pcs.	3.08 kg per bag	€0.45 per pc.

Small coils

Uncoated joint sheet metal



Black

Galvanised

Art. no.	Description	PU	Secondary packaging	Weight per roll	Price
070175	Joint sheet metal, black, 1.5 x 250 mm in accordance with the WU directive	1 roll of 30 m	12 rolls per pallet	90.00 kg	Available on request
070176	Joint sheet metal, black, 1.5 x 300 mm in accordance with the WU directive	1 roll of 30 m	10 rolls per pallet	108.00 kg	Available on request
070177	Joint sheet metal, black, 2.0 x 200 mm	1 roll of 30 m	12 rolls per pallet	96.00 kg	Available on request
070178	Joint sheet metal, black, 2.0 x 250 mm in accordance with the WU directive	1 roll of 30 m	10 rolls per pallet	120.00 kg	Available on request
070180	Joint sheet metal, black, 2.0 x 300 mm in accordance with the WU directive	1 roll of 30 m	8 rolls per pallet	144.00 kg	Available on request
070090	Joint sheet metal, galvanised, 0.6 x 100 mm	1 roll of 30 m	60 rolls per pallet	14.40 kg	Available on request
070100	Joint sheet metal, galvanised, 0.6 x 125 mm	1 roll of 30 m	60 rolls per pallet	18.00 kg	Available on request
070110	Joint sheet metal, galvanised, 0.6 x 150 mm	1 roll of 30 m	48 rolls per pallet	21.60 kg	Available on request
070120	Joint sheet metal, galvanised, 0.6 x 200 mm	1 roll of 30 m	36 rolls per pallet	28.80 kg	Available on request
070130	Joint sheet metal, galvanised, 0.6 x 250 mm	1 roll of 30 m	30 rolls per pallet	36.00 kg	Available on request
070135	Joint sheet metal, galvanised, 0.6 x 300 mm	1 roll of 30 m	24 rolls per pallet	43.20 kg	Available on request
070181	Joint sheet metal, galvanised, 2.0 x 300 mm	1 roll of 30 m	8 rolls per pallet	144.00 kg	Available on request

Black joint sheet metal with a min. thickness of 1.5 mm and a min. width of 250 mm complies with the WU directive for Water-Impermeable Concrete Buildings. All other types do not comply with this directive.

MASTER-Connect

Connector for joint sheet metal and joint tapes

MASTER-Connect joint sheet metal



Technical details page 48

Art. no.	Description	PU	Weight	Price €	
070196	MASTER-Connect joint sheet metal F150 for joint sheet metal widths up to 150 mm	1	2.00 kg	€20.20 per pc.	
070193	MASTER-Connect joint sheet metal F250 for joint sheet metal widths up to 250 mm	1	3.00 kg	€22.95 per pc.	
070194	MASTER-Connect joint sheet metal F330 for joint sheet metal widths up to 330 mm	1	4.00 kg	€27.60 per pc.	

Resistance:

- Oil and petrol
- Diluted acids and alkalis
- Liquid manure and slurry
- Fermentation mash
- Radon and methane gas

MASTER-Connect joint tape



Technical details page 48

Art. no.	Description	PU	Weight	Price	
070610	MASTER-Connect joint tape B250 for joint tape widths up to 250 mm	1	3.00 kg	€30.35 per pc.	
070620	MASTER-Connect joint tape B330 for joint tape widths up to 330 mm	1	4.00 kg	€38.10 per pc.	

Resistance:

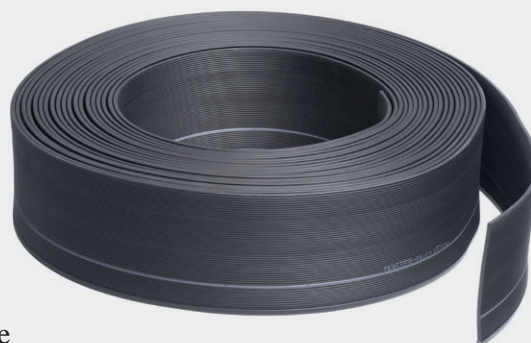
- Diluted acids and alkalis
- Liquid manure and slurry
- Fermentation mash

MASTER-MultiFlex (MMF 140)

Active joint tape for permanent waterproofing of construction joints in concrete with General Building Supervisory Test Certificate (abP)

NEW! MASTER-MultiFlex (MMF 140)

combines passive and active waterproofing in one product. This combination guarantees a high level of reliability.

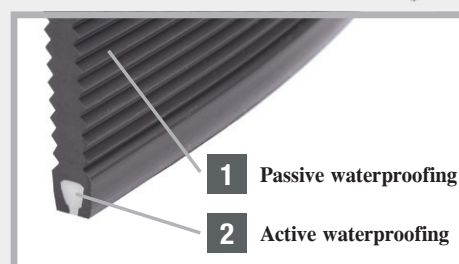


1. Passive waterproofing

The joint tape provides the mechanical waterproofing of the joint. The corrugated structure of the joint tape extends the water circulation path and thus makes for increased reliability.

2. Active waterproofing

The integrated swelling tape expands downwards into the construction joint. At the same time, the flanks of the joint tape are pressed outwards by the expansion, making the flow of water impossible.



MMF 140 product range

Technical details pages 49 – 50

Art. no.	Description	PU	Secondary packaging	Weight	Price	
080643	MMF 140 MASTER-MultiFlex Construction joint tape with additional swelling profile, Width 140 mm Roll length 25 m including 50 mounting brackets	1 carton	32 cartons per pallet	30.00 kg per carton	€9.90/m	
080645	MMF 140 Adhesive joining kit 6 fixing clips and 3 m special adhesive tape Width 75 mm	1 set		0.90 kg per set	€13.70 per set	
080647	MMF 140 Mounting bracket for attachment of joint tape to the reinforcement	1 sack of 50 pcs.		4.30 kg per sack	€0.72 per pc.	
080648	MMF 140 Fixing clips for securing the adhesive bonded joint	1 bag of 25 pcs.		1.50 kg per bag	€0.46 per pc.	
080649	MMF 140 Adhesive tape Width 75 mm Roll length 3 m for bonding of joints	1 pc.		0.45 kg per roll	€10.95 per roll	
070605	MMF 140 MASTER-Connect "active" Joint tape connector with addi- tional swelling tape protection	1 pc.		2.00 kg per pc.	€29.90 per pc.	

Joint tape, factory standard PVC

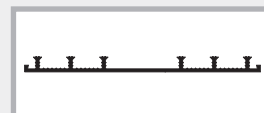
Construction joint tape, internal

Type	Tape width	Roll length	PU	Weight per roll	PVC Factory standard	Price
A 19	190 mm	25 m	1 pc.	24.0 kg	080500	€4.60/m
A 24	240 mm	25 m	1 pc.	30.0 kg	080510	€6.15/m
A 32	320 mm	25 m	1 pc.	45.0 kg	080520	€8.70/m



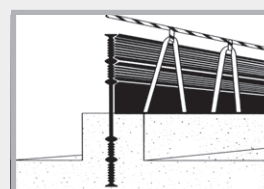
Construction joint tape, external

AA 19	190 mm	25 m	1 pc.	27.0 kg	080530	€6.40/m
AA 24	240 mm	25 m	1 pc.	42.0 kg	080540	€8.00/m
AA 32	320 mm	25 m	1 pc.	67.0 kg	080550	€11.35/m



Construction joint tape, internal, reinforced with plastic loops

SFA 100	100 mm	50 m	1 pc.	35.0 kg	080590	€4.25/m
SFA 150	150 mm	25 m	1 pc.	23.0 kg	080600	€6.15/m
SFA 190	190 mm	25 m	1 pc.	29.0 kg	080610	€8.60/m
SFA 240	240 mm	25 m	1 pc.	39.0 kg	080620	€9.65/m
SFA 320	320 mm	25 m	1 pc.	67.0 kg	080630	€17.65/m



with plastic loops

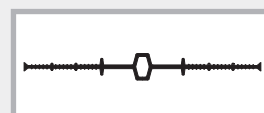
Construction joint tape, internal, made of rigid PVC

P 150	150 mm	25 m	1 pc.	26.0 kg	080640	€3.75/m
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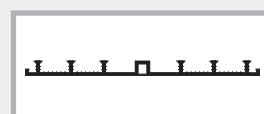
Expansion joint tape, internal

D 19	190 mm	25 m	1 pc.	34.0 kg	080650	€6.05/m
D 24	240 mm	25 m	1 pc.	50.0 kg	080660	€7.85/m
D 32	320 mm	25 m	1 pc.	62.0 kg	080670	€12.00/m



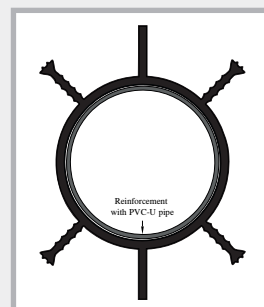
Expansion joint tape, external

DA 19	190 mm	25 m	1 pc.	32.0 kg	080680	€7.75/m
DA 24	240 mm	25 m	1 pc.	49.0 kg	080690	€9.15/m
DA 32	320 mm	25 m	1 pc.	68.0 kg	080700	€12.85/m



Crack inducer tubes

Art. no.	Type	Diameter / mm	Pipe length	PU	Pipe weight	Price
080710	Q 1	88 wall thickness 24-35 cm	2.5 m	1 pc.	10.0 kg	€18.90/m
080712	Q 1	88	3.0 m	1 pc.	11.0 kg	€18.90/m
080714	Q 1	88	3.5 m	1 pc.	14.0 kg	€18.90/m
080722	Q 3	60 wall thickness 17-24 cm	2.5 m	1 pc.	6.0 kg	€16.05/m
080724	Q 3	60 + cavity walls	3.0 m	1 pc.	8.0 kg	€16.05/m
080726	Q 3	60	3.5 m	1 pc.	10.0 kg	€16.05/m



Joint tape clamp

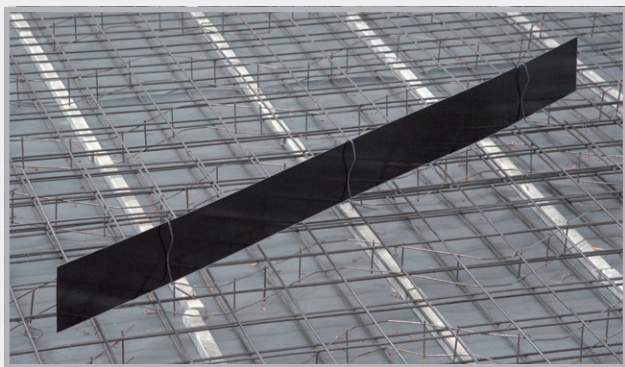
Art. no.	Description	PU	Weight	Price
070510	Joint tape clamp 3 pcs. per metre and side	1 carton of 200 pcs.	1.50 kg per carton	€22.85 100 pcs.



VB joint sheet metal High-pressure metal sheets



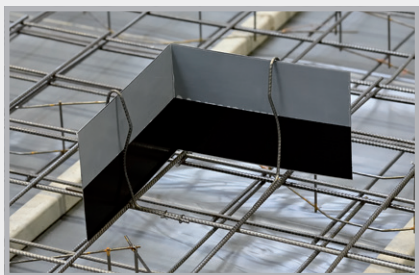
Joint sheet metals with reactive, bitumen-free polymer coating for waterproofing of construction joints



Packaging in strips and rolls, with coating on one or both sides.

Installation of VB joint sheet metal

We deliver strips or rolls, complete with installation accessories.



Remove the foil on the underside and start (for example) in the corner. The sheet metal can be bent on the building site.



Also remove the foil on the underside of the connection plate and prepare for the 6 cm overlap.



Secure embedment in concrete, max. 50% of sheet metal profile width. The foil on the upper side is removed prior to concreting of the wall. When using sheet metal plates with a coating on one side, the coating must always face the water side.

Detailed information:

Request our technical data sheet or scan the QR code!

YouTube



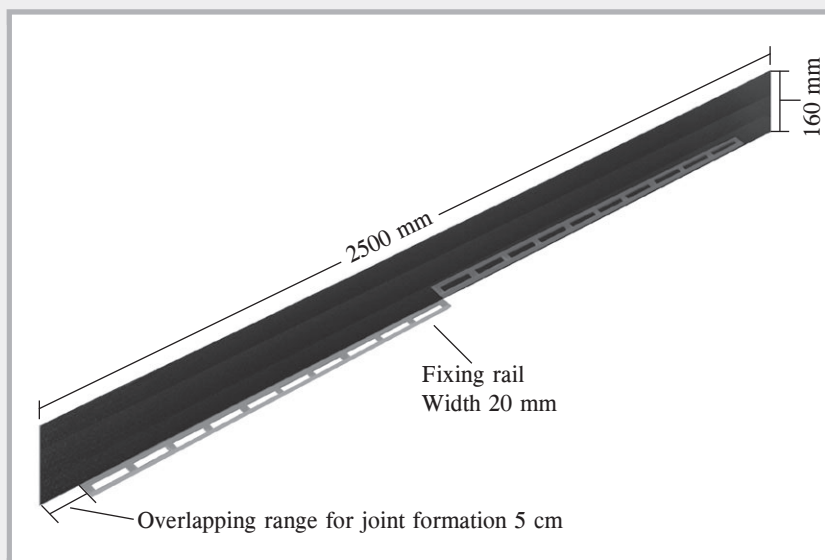
MASTER joint sheet metal



Product description

■ MASTER joint sheet metal is made of galvanised sheet steel which is fully coated on both sides with a special coating. The coating forms a water-tight bond with the fresh concrete.

■ Element length 2500 mm
Width 160 mm
Total thickness 2.1 mm



Function

- The special coating ensures a very firm bond between concrete and joint sheet metal
- Tested for resistance to pressurised and non-pressurised water
- Environmentally friendly
- For in-situ concrete and prefabricated construction
- Suitable for zones with frequently varying water levels
- For waterproofing of foundation/wall, foundation/foundation and wall/wall construction joints.



Scope of supply

- MASTER joint sheet metal is supplied complete with fixing clips in stable wooden crates. Thanks to the fixing rail, no further accessories are required for installation.



 YouTube



Installation of MASTER joint sheet metal



1 Remove the lower protective film



2 Place element on top of upper reinforcement layer



3 Overlap MASTER joint sheet metal by 5 cm and press together



4 Secure the joint with a fixing clip



5 Fix the element's support rail using a tie wire. Simply bend the element in the corner area



6 The MASTER joint sheet metal elements can be bent in any way. Waterproofing of staggered levels is also possible without any problems.

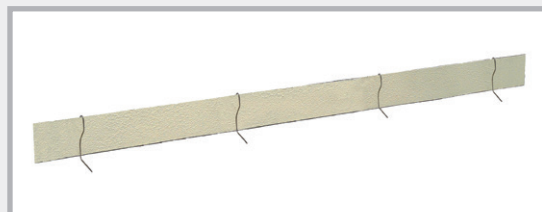
In order to prevent the joint sheet metal from being contaminated, do not remove the upper film until after concreting of the foundation.

Joint sheet metal MB Overlap

Mineral-coated joint sheet metals for waterproofing of construction joints



Presentation: 160 and 120 mm-wide joint sheet metal with full mineral coating on both sides.

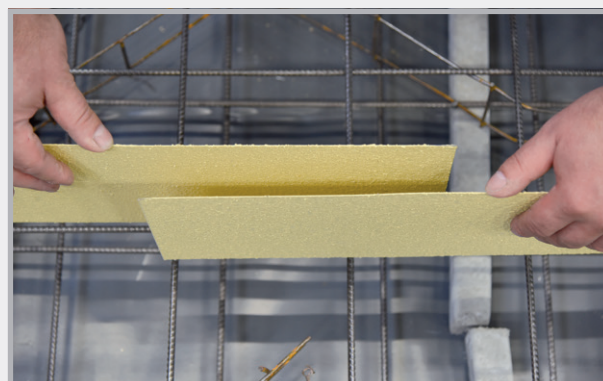


Installation of MB joint sheet metal

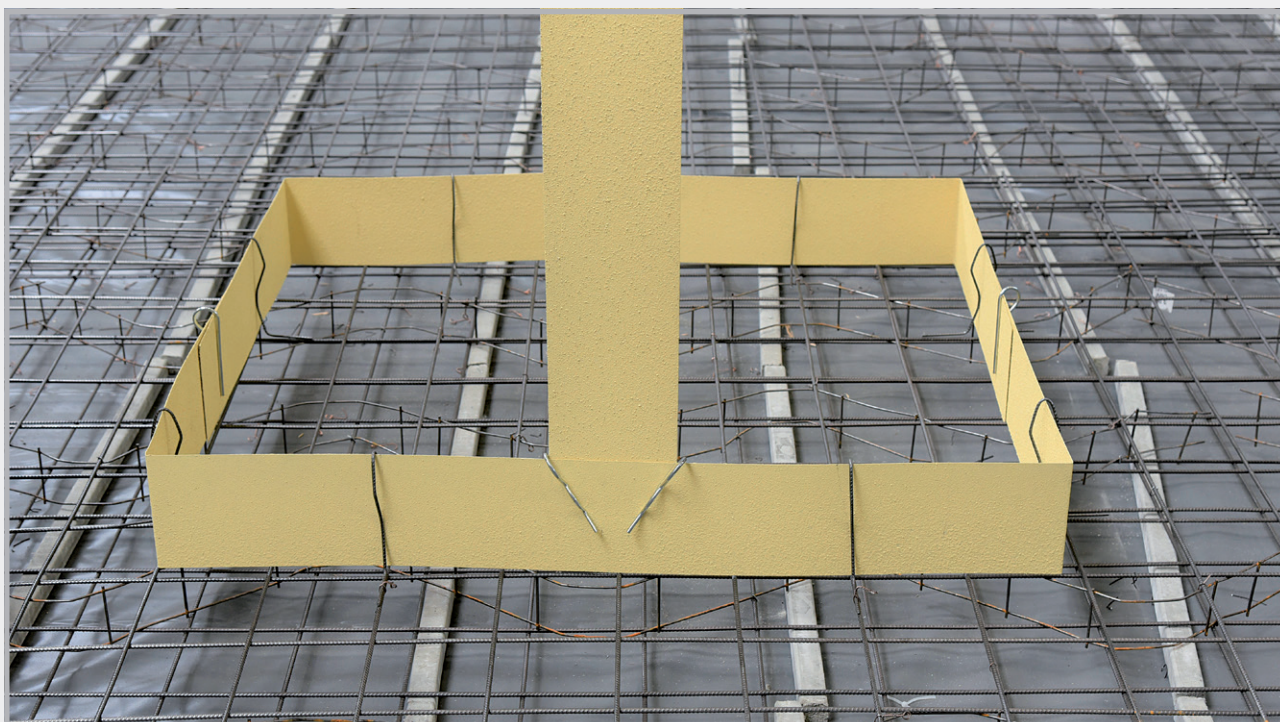
The joint sheet metal elements are supplied complete with installation accessories.



The coating is fully insensitive. The metal sheets can be bent by hand.



20 cm overlap in area of joint.
No adhesive joints required.



Joint sheet metal MB before placement of concrete. 3 cm embedment depth in the concrete is sufficient to achieve a pressure-tight seal.

Detailed information:

Request our technical data sheet or scan the QR code!

 YouTube



AKTIV joint sheet metal



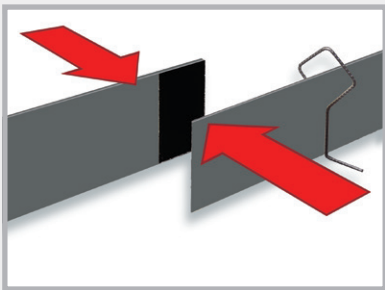
Bentonite-coated joint sheet metal for waterproofing of construction joints.

Presentation

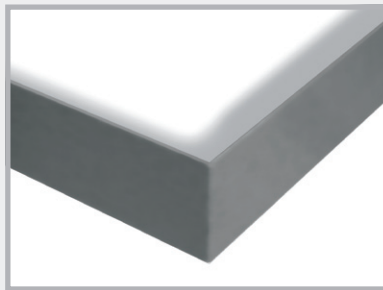
Joint sheet metal, fully coated on one side with bentonite
Delivered complete with installation accessories.



Installation of AKTIV joint sheet metal



Tear the protective film off the ends of the two elements to be bonded and press them together.



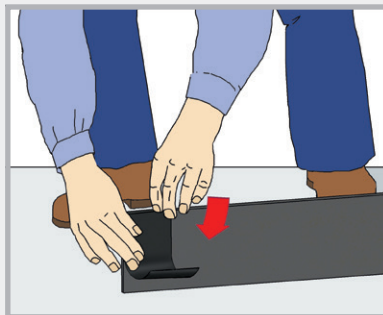
Corners are formed by simply bending the elements.



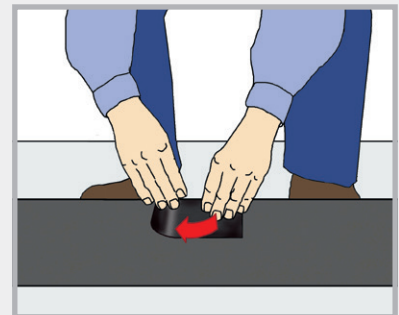
Cut the element to the required length.



Cut off strip of adhesive tape.

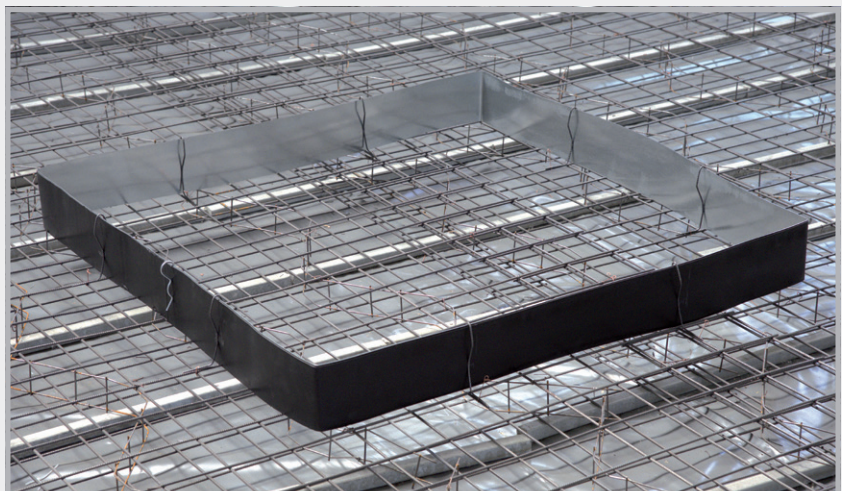


Apply the adhesive tape in the area where two elements are to be joined.
The adhesive tape must be applied on both elements.



AKTIV joint sheet metal installation complete.

Coating always faces the water side.
Embedment depth of 3.5 cm in the concrete.



Detailed information:
Request our technical data sheet!

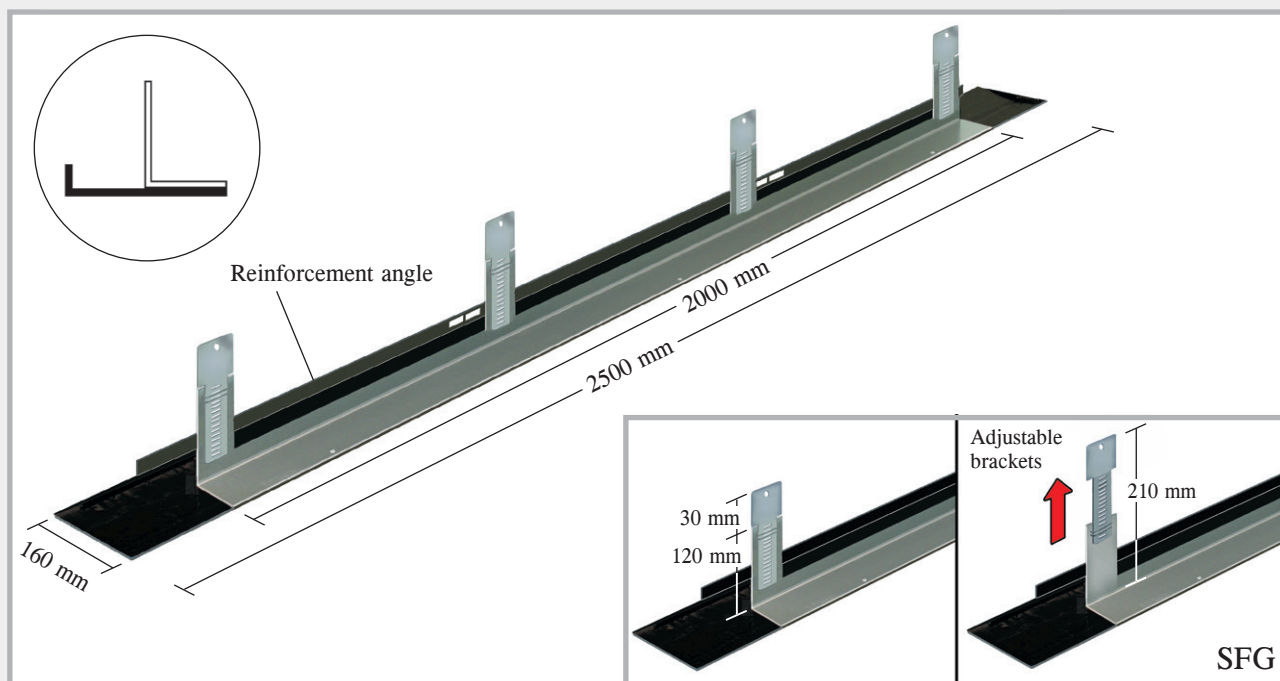
Crack-inducing profiles



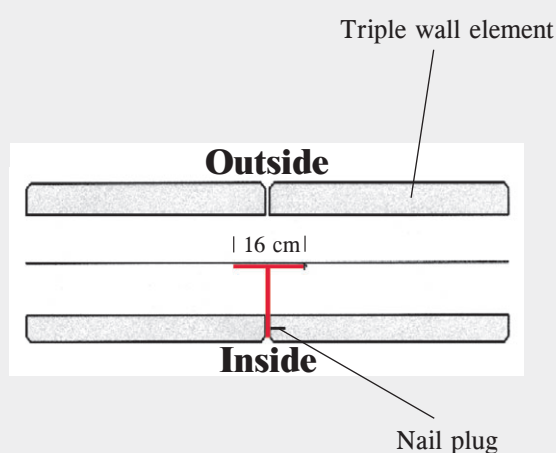
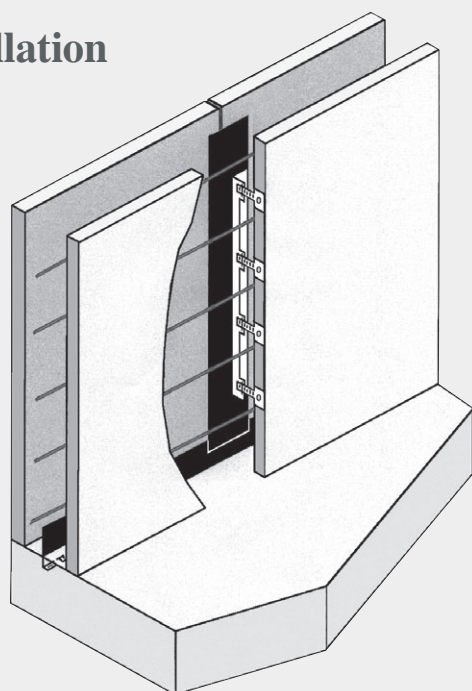
MASTER joint sheet metal SFG adjustable
(prefabricated crack inducing element, straight) for straight butt joints

Product description

- The profile consists of a fully coated joint sheet metal, which forms a watertight bond with the fresh concrete, and adjustable brackets.

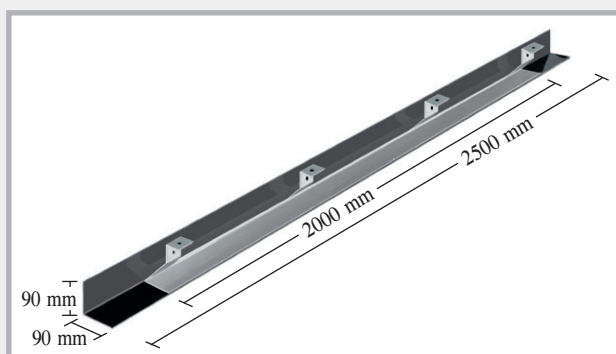


Installation

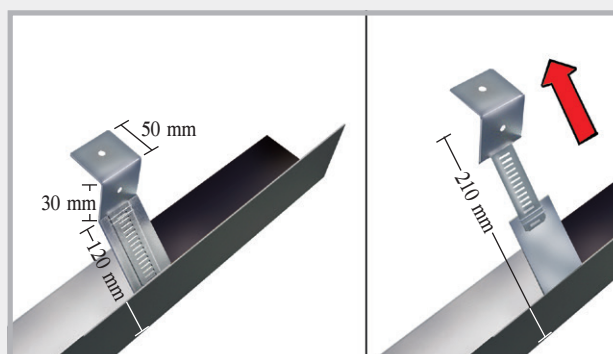


The elements supplied are completely prefabricated and are fixed to the internal formwork of the triple wall using the nail plugs provided. The lower part of the elements is bonded to the waterproofing element in the foundation area.

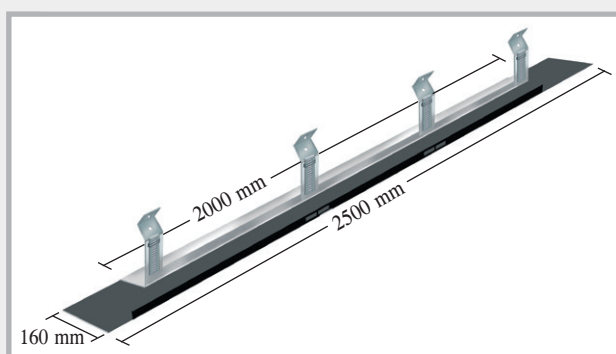
Crack inducing elements for the corner area, SFE adjustable FE adjustable



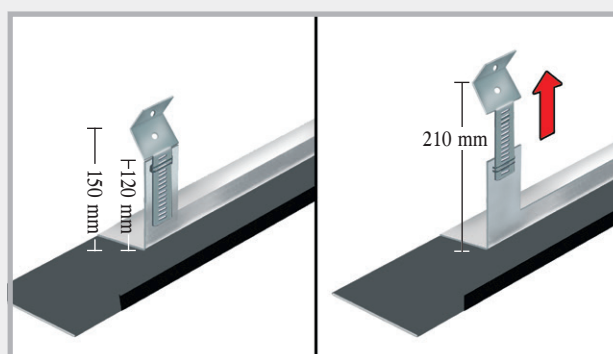
SFE profile



Adjustable brackets

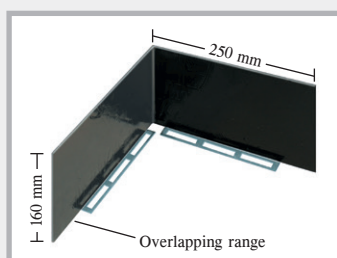
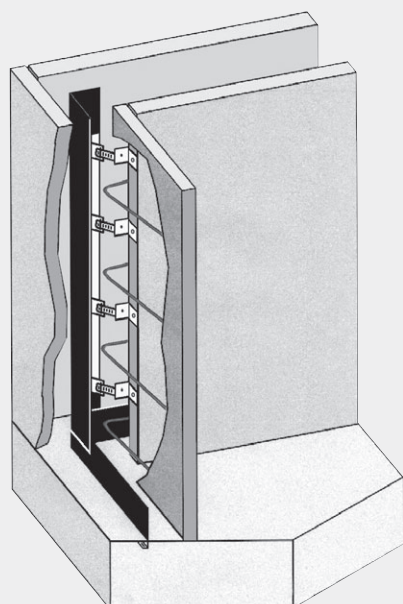


FE profile



Adjustable brackets

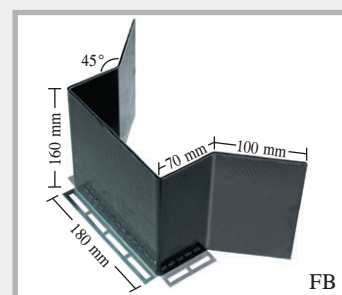
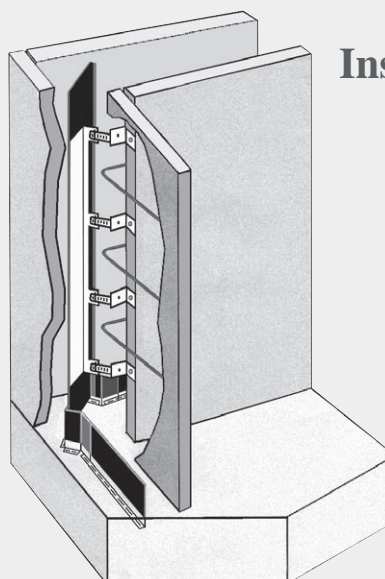
Installation of SFE



MASTER joint sheet metal angle
90° for connection of SFE profile

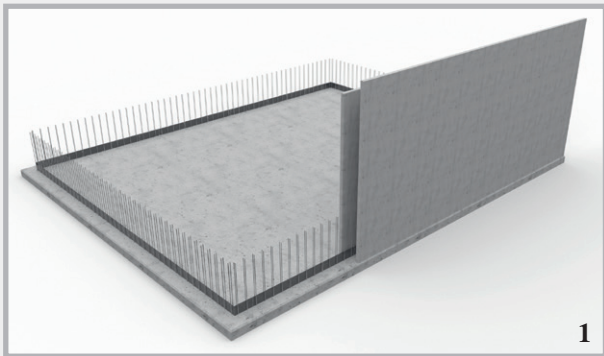
The adjustable brackets
always enable contact with the
waterproofing elements in the
foundation.

Installation of FE

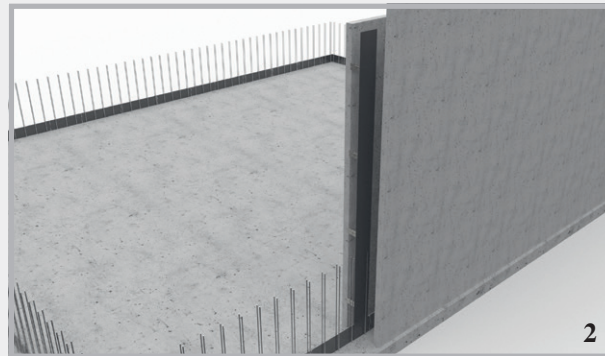


MASTER joint sheet metal
corner element FB for connec-
tion of FE profile

At the construction site



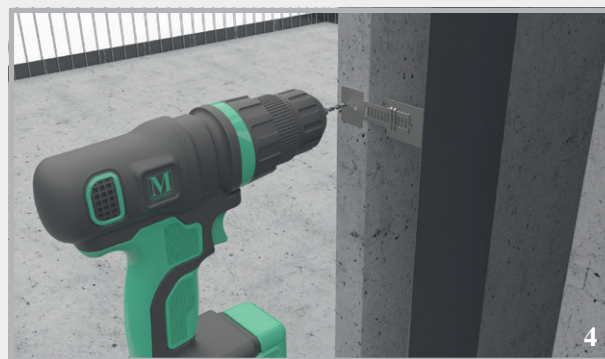
The first cavity wall element is positioned with VB joint sheet metal acting as the foundation/wall waterproofing element.



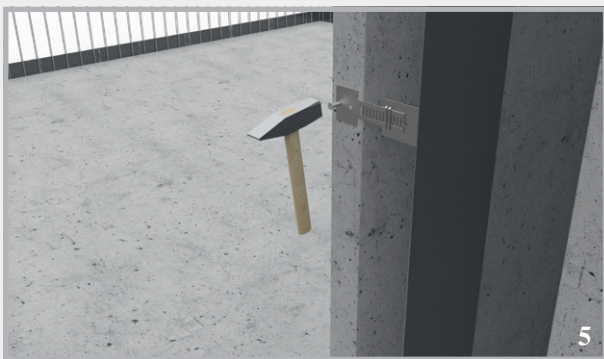
The SFG profile is set vertically and overlapped with the joint sheet metal (overlap ≥ 5 cm).



The adjustable mounting brackets are adjusted to fix them on the face of the cavity wall.



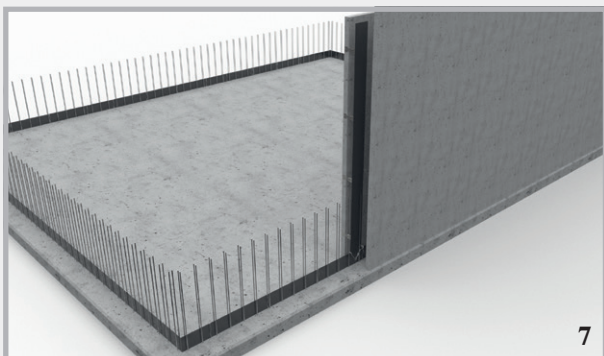
The wall formwork is drilled in order to fix the mounting bracket.



The mounting bracket is fixed with a drive-in plug.



The overlapping area on the floor/wall joint sheet metal is secured with two fixing clips.



Installation of the SFG profile is complete; the next cavity wall element can be placed.



Follow the same procedure to install the SFE crack-inducing profiles in the corner area of the cavity wall elements. The geometry of the mounting brackets is optimised for installation in the corner area.

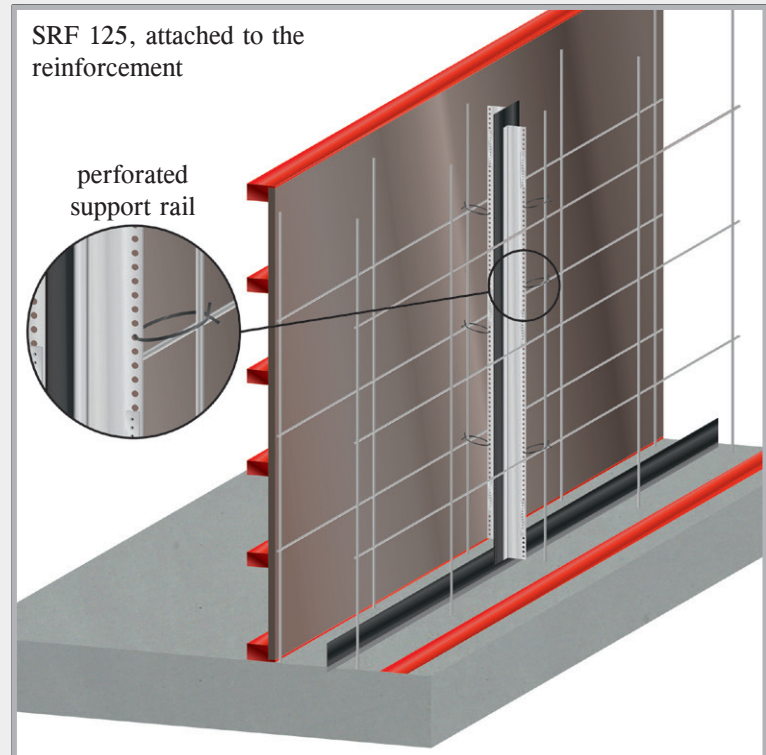
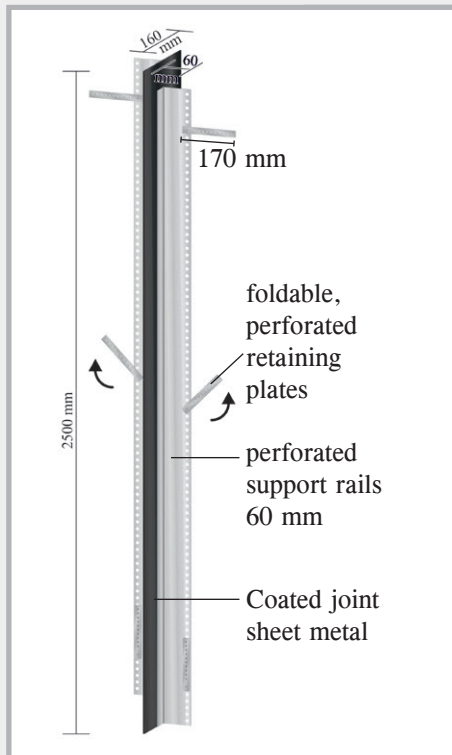
Crack inducing profile SRF 125 Multi



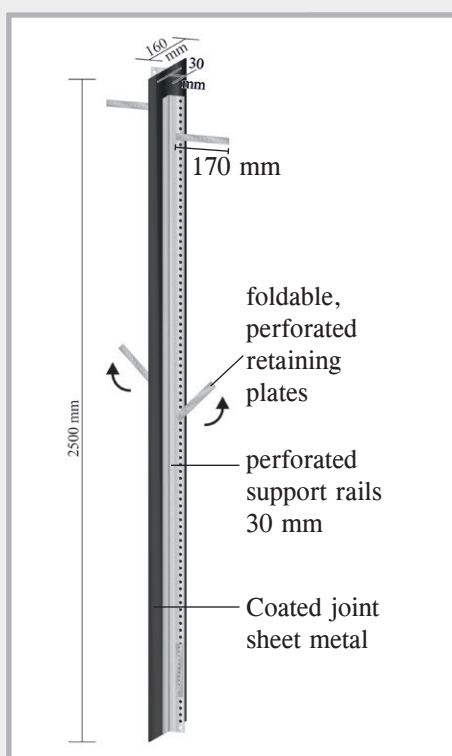
Product description

The SRF 125 Multi profile consists of a coated joint sheet metal element with perforated support rails attached to both sides and additional retaining plates. Depending on the requirements, the profile is fastened via the support rails or the perforated foldable retaining plates.

Type SRF 125 Multi in-situ concrete



Type SRF 125 Multi cavity wall

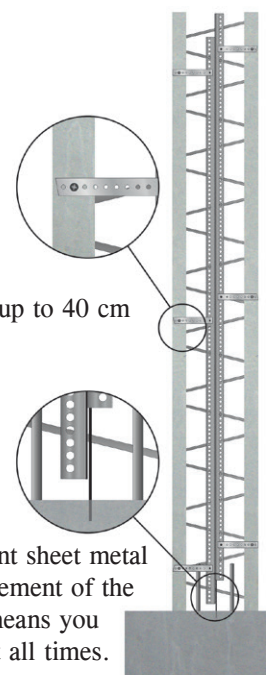


Cavity wall installation

One profile for straight joints and corner constructions.

Fastening with support rails
Wall thicknesses up to 40 cm

Connection to joint sheet metal
The offset arrangement of the retaining plates means you remain flexible at all times.



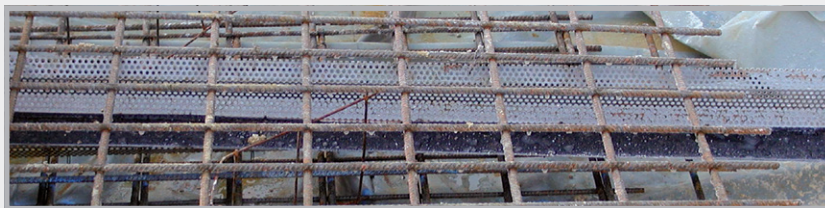
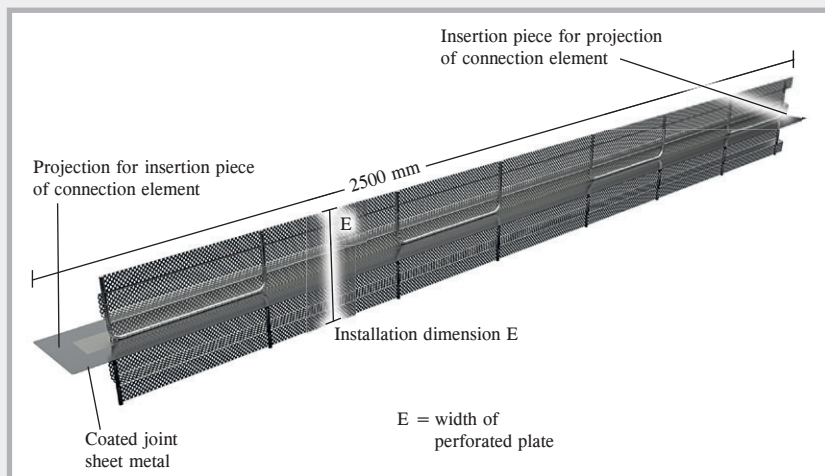
Profiles for in-situ concrete

Stopend panel joint sheet metal ABS



Product description

- The ABS profiles consist of a joint sheet metal coated with a special coating and a perforated plate welded on on both sides. The coated joint sheet metal forms a watertight bond with the fresh concrete. The ABS profiles are installed in horizontal and vertical construction joints of foundations or walls.



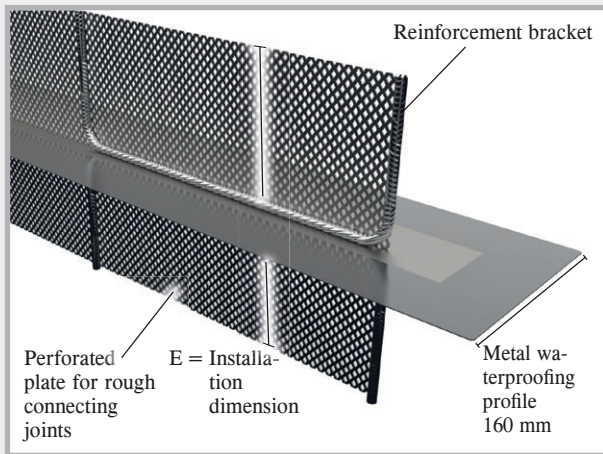
Function and installation

- Place the ABS elements between the reinforcement layers and fix them with tie wire
- Fit the individual elements into each other and glue the panels together
- Additional shuttering is recommended when using thick/high constructional elements.
- The elements remain in the concrete, i.e. no time-consuming shuttering or stripping required
- Remove the foil before concreting

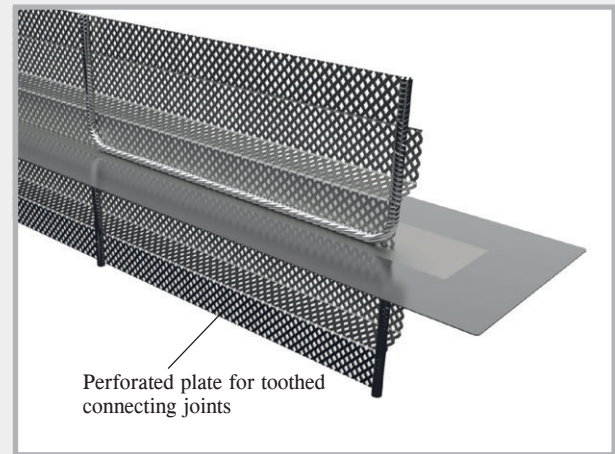


In your order, please specify the width within the reinforcement (please refer to the list of products).

ABS rough



ABS toothed

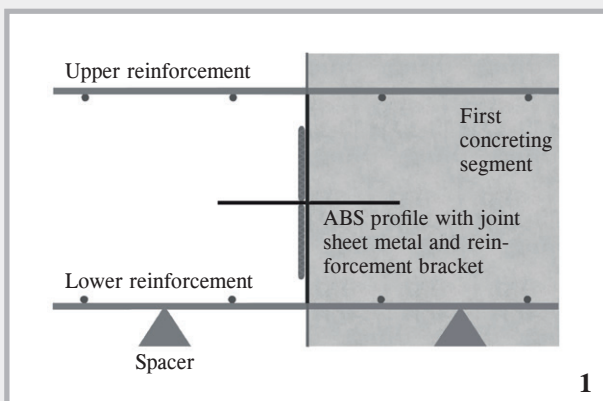


ABS stopend panels for wall and foundation shuttering

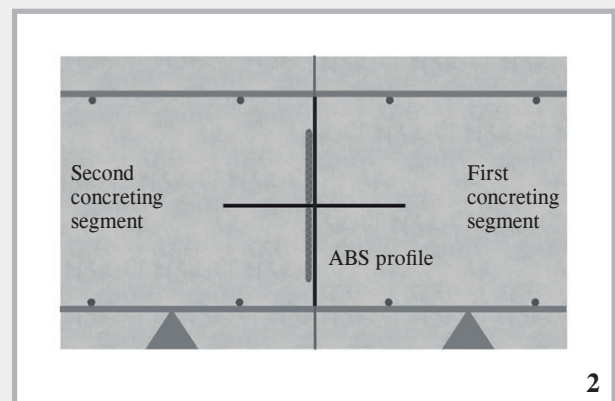
The ABS elements consist of perforated sheet metal with integrated coated joint sheet metal. The scope of delivery includes 2 fixing clips per element.

We require the installation dimension E, which is the measurement between the upper and lower reinforcement.

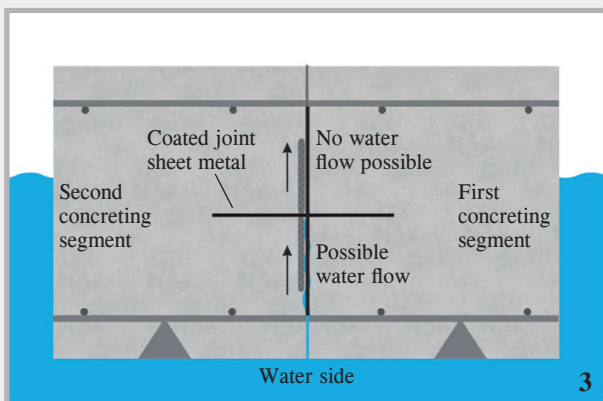
Function of ABS stopend panels



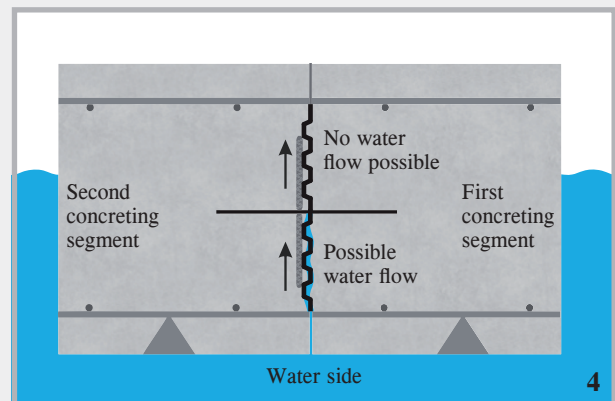
The ABS element serves as shuttering for the first concreting segment.



The rough or toothed version ensures a reliable connection of the second concreting segment.



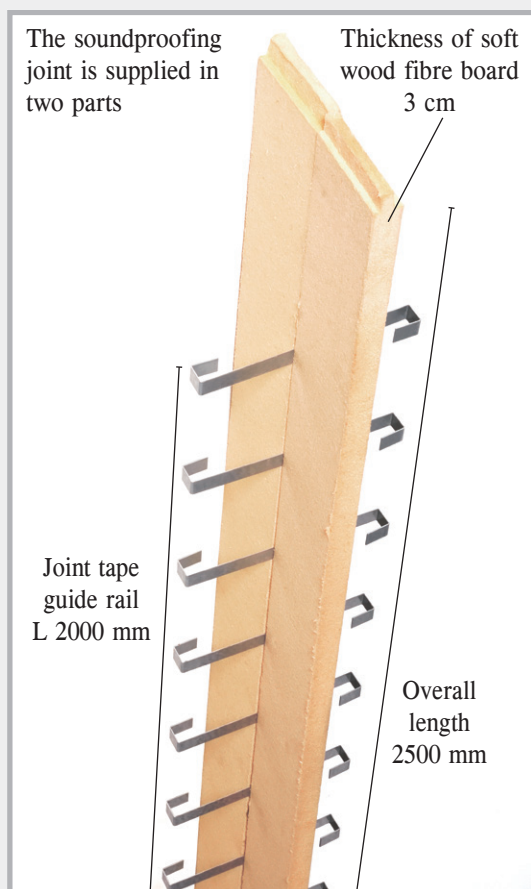
The coated joint sheet metal eliminates the possibility of water inflow.



Same waterproofing principle, here in combination with toothed joint according to DIN 1045-1/EC2.

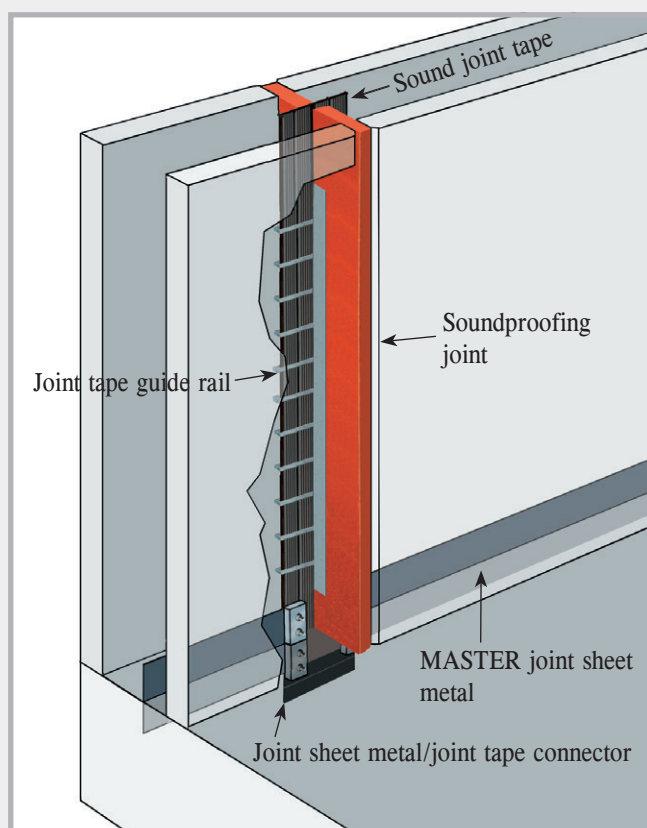
Soundproofing joint DSK

Product description



Installation and function

- In the course of concreting of the foundation, the coated area of the sound joint tape DSF is encased in the concrete
- Remove the foil before concreting
- In the foundation area, the sound joint tape is connected to the foundation/wall waterproofing element using the joint sheet metal/joint tape connector
- The soundproofing joint is fastened to the front face of the wall elements.
- The sound joint tape is fed upwards through the joint tape guide rail
- Secure joint tape with joint tape clamps



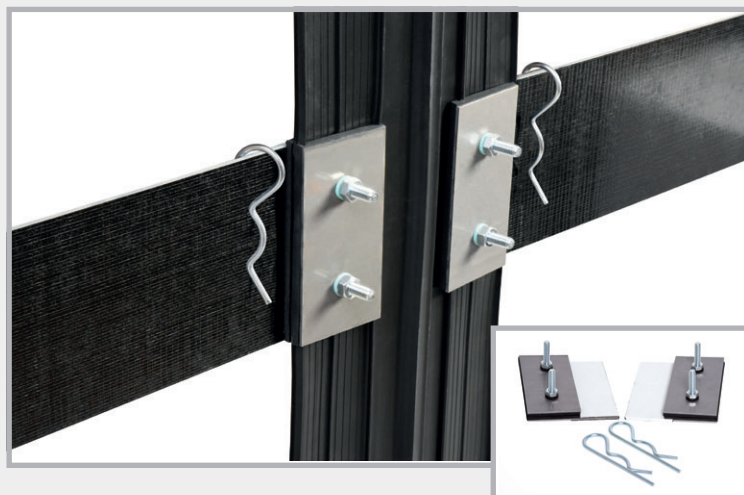
Joint sheet metal/joint tape connector



Product description

The joint sheet metal/joint tape connector establishes a reliable pressure water-tight connection between PVC joint tapes and coated joint sheet metals.

A joint sheet metal/joint tape connector consists of 2 connecting elements.



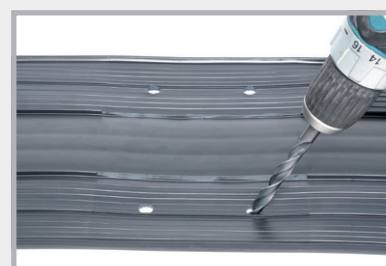
Installation



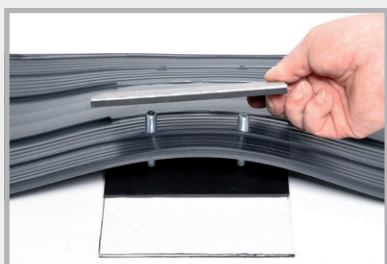
The ribs must be removed from the joint tape in the areas where the connectors are mounted.



Mark the positions of the bore holes.



Drill the holes.



Assemble the connectors and joint tape.



Tighten the screws.



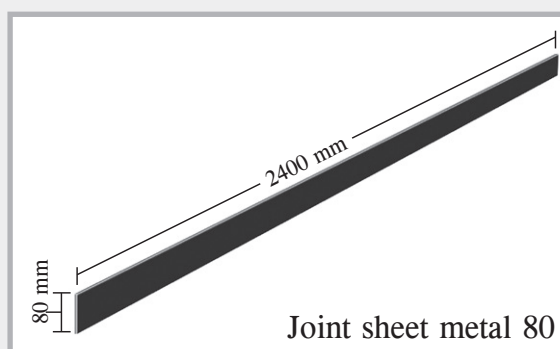
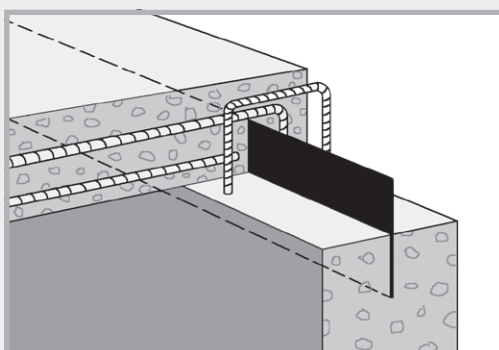
Pull off the foil, affix the connection plates and secure with the fixing clips.

Joint sheet metal 80

Joint sheet metal fully coated on both sides for wall/slab connection.

Length: 2400 mm; width: 80 mm

Pack: wooden crate with 50 elements + 55 fixing clips
carton with 25 elements + 30 fixing clips



Joint sheet metal 80

MASTER-Connect

Connector for joint sheet metal and joint tapes

MASTER-Connect connectors are manufactured in 2 versions. MASTER-Connect Type F for joint sheet metal and Type B for joint tapes.

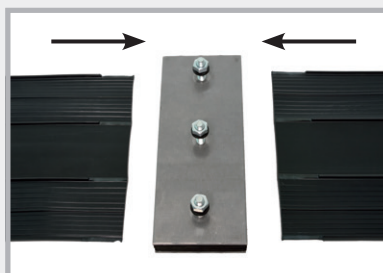
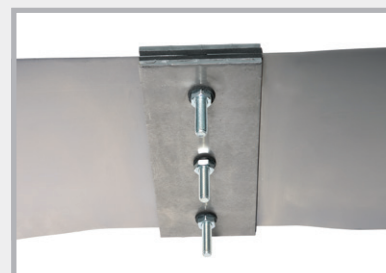
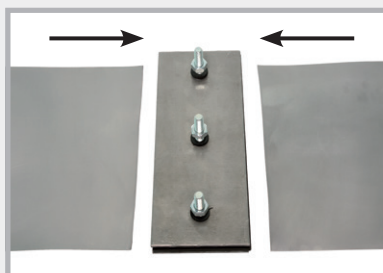


- No boreholes
- Supplied ready for installation
- No welding
- Completely pressure water-tight connection

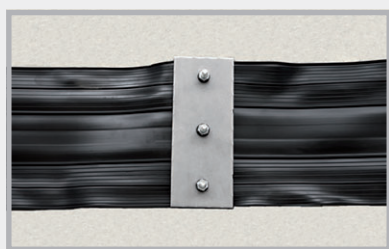


MASTER-Connect technology

1. The connectors are supplied preassembled.
2. The joint sheet metal elements or joint tapes are pushed in between the seals on the left and right.
3. The ribs are removed at the insertion section of the joint tapes to ensure this section is as smooth as possible.
4. Following insertion the screws are tightened to 8 Nm.
5. The connection is completely pressure water-tight.



Installation options for joint tape and joint sheet metal



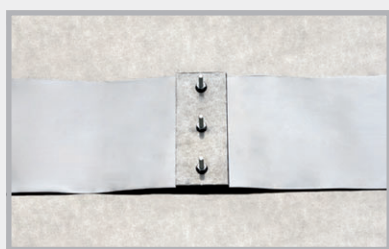
Butt joint



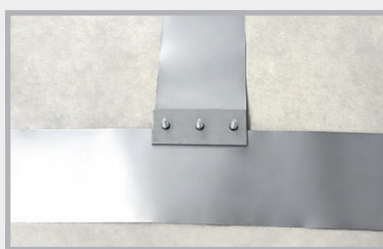
T piece



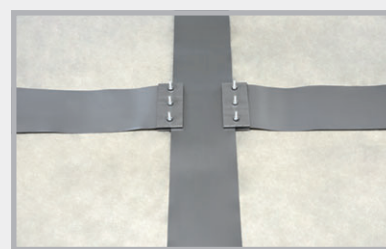
Junction



Butt joint



T piece



Junction

Detailed information:

Request our current brochure or scan the QR code!

 YouTube



MASTER-MultiFlex (MMF 140)

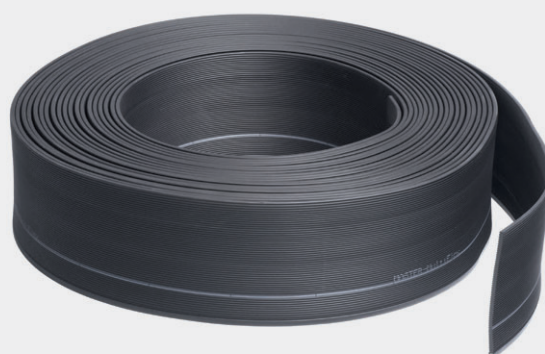
NEW! The active joint tape with General Building Supervisory Test Certificate for permanent waterproofing of construction joints in concrete. MMF 140 is a PVC joint tape with an additional swelling profile on one side.



MMF 140 product description

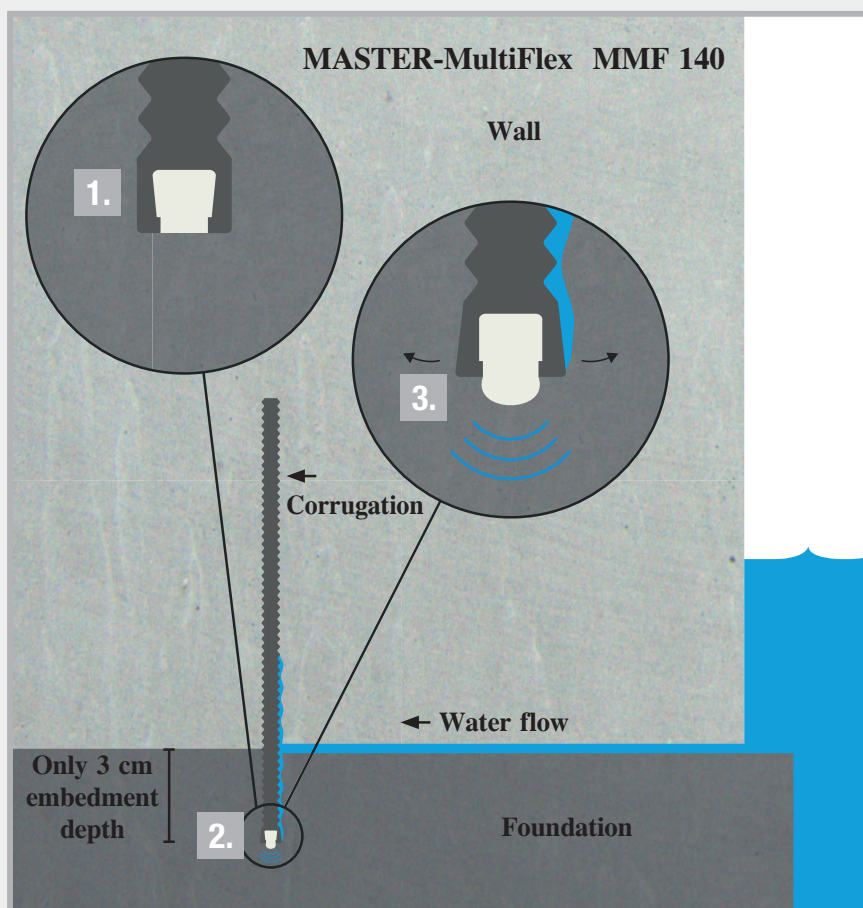
Material: Soft PVC – free of cadmium, chrome and lead
MMF 140 does not contain any substances of very high concern (SVHCs) according to Annex XIV of the REACH Regulation.
MMF 140 thus complies with European standards.

Swelling profile: Active TPE
Height: 140 mm
Thickness: approx. 6 mm
Profile: Corrugated
Safety: With marking strips
Elongation at break: High
Tensile strength: High
Workability: -10°C to +60°C
Joinability: Welding, bonding or MASTER-Connect “active”



Function of MMF 140

1. The figure shows the side of the joint tape with the swelling profile still not activated.
2. The pressure resistance of MMF 140 has already been proven from an embedment depth of 3 cm. In the image, you see the joint tape with an activated swelling profile.
3. Here, you see the function of the swelling profile. It expands downwards and compresses the joint. For further reliability the two flanks are pushed outwards, also preventing the flow of water.

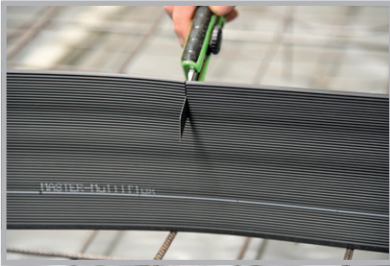


Resistance

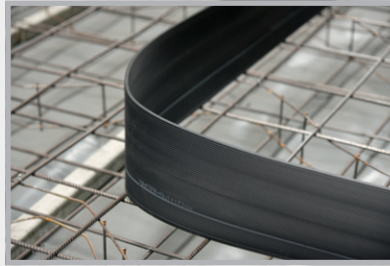
MMF 140 has a good to very good resistance to a number of chemicals.

- | | |
|-----------------------------|-----------------------------------|
| ■ Diluted acids and alkalis | ■ Methane gas |
| ■ Salt water | ■ Biogas |
| ■ Alkalinity of concrete | ■ Very good ageing resistance |
| ■ Urea | ■ Very good long-term performance |

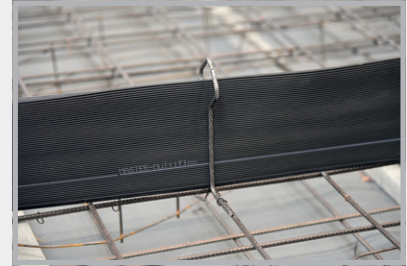
Processing and installation of MMF 140



The non-sagging joint tape can be cut to length easily with a cutter.

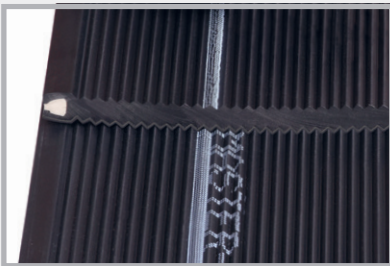


Non-sag but flexible.



Fastened using the MMF 140 mounting bracket provided.

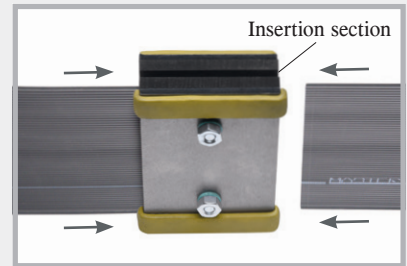
Three bonding options



1. Welding: Duration of approximately 30-40 min. at the construction site
Welded, overlapped joint.



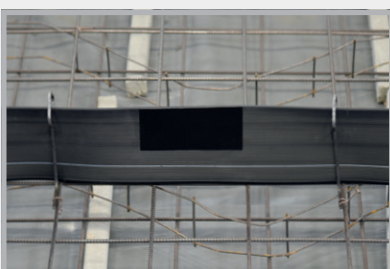
2. Adhesive joint: Duration of approximately 10-15 min. at the construction site
Secure the join area with the MMF 140 fixing clip.



3. Screwed connection: Duration of approximately 10-15 min. at the construction site
The MMF 140 joint tape is inserted into the MASTER-Connect on the left and right, and the screws are tightened to approximately 8 Nm.

Connection of SRF 125 crack-inducing profiles

Duration of approximately 10-15 min. at the construction site



Apply the MMF 140 adhesive tape and remove the backing.



Glue on the SRF 125 crack-inducing profile and secure it with 2 fixing clips.

INJECTION HOSES CONSTRUCTION CHEMISTRY



Mastertec EasySeal 1K

page 52

**Injection hoses
+ accessories**

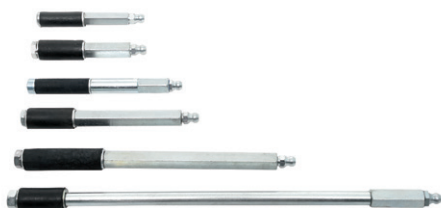


**MASTERTUBE
Yellow**



**MASTERTUBE
Injection hose**

pages 53 – 56



**PROTECT resin system +
injection packers**

pages 57 – 59



**LIDOL concrete release agent
in MULTI and BIO quality**

pages 60 – 62

Mastertec EasySeal 1K





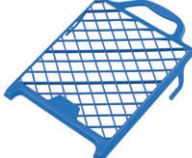



NEW! Single-component, solvent-free, water-free and bitumen-free structural waterproofing

Technical details pages 63 – 68



With high-pressure test for external strip-shaped waterproofing of walls made of prefabricated elements

- International high-pressure test up to 80 m water column with a crack width of up to 3 mm
- Tested in accordance with the current WU directive
- General Building Supervisory Test Certificate

Art. no.	Description	PU	Weight	Price	
050100	Mastertec EasySeal 1K Single-component high-pressure waterproofing 14 kg bucket	14 kg bucket (2 x 7 kg bag) 30 buckets per pallet	14.90 kg per bucket	€16.30 per kg	
050110	Mastertec EasySeal 1K non-woven Roll length 100 m Roll width 0.3 m	1 pc.	3.80 kg per roll	€132.60 100 m rolls	
050120	Mastertec EasySeal 1K special roller Width 18 cm <i>Professional quality</i>	1 pc.	0.10 kg per pc.	€13.50 per pc.	
050130	Mastertec EasySeal 1K roller frame <i>Professional quality</i>	1 pc.	0.20 kg per pc.	€5.10 per pc.	
050140	Mastertec EasySeal 1K roller grid Size 24 x 22 cm <i>Professional quality</i>	1 pc.	0.05 kg per pc.	€3.70 per pc.	
050150	Mastertec EasySeal 1K corner roller <i>Professional quality</i>	1 pc.	0.21 kg per pc.	€27.10 per pc.	
050160	Mastertec EasySeal 1K professional brush Width 50 mm <i>Professional quality</i>	1 pc.	0.12 kg per pc.	€15.40 per pc.	
050170	Mastertec EasySeal 1K pressure roller Width 15 cm <i>Professional quality</i>	1 pc.	0.19 kg per pc.	€16.30 per pc.	

MASTERTUBE

Injection hose systems



Injection hoses

Technical details pages 69 – 71

Art. no.	Description	PU	Weight	Price
030400	MASTERTUBE "YELLOW" round, size: 6/12 mm PVC injection hose	1 roll of 100 m	11.20 kg per roll	€5.65 per m
030050	MASTERTUBE injection hose round, size: 5/10 mm, red/yellow with woven jacket	1 roll of 100 m	10.00 kg per roll	€6.25 per m



Art. no. 030400



Art. no. 030050

- Very high water pressure test
- For injection with polyurethane resin
- For multiple injections with acrylate and cement suspension
- Hose sections up to 15 m with polyurethane resin

- Very high water pressure test
- For injection with polyurethane resin
- For multiple injection with acrylate
- Hose sections up to 15 m with polyurethane resin















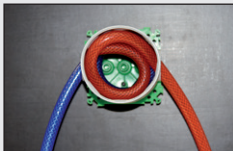



MASTERTUBE installation set

Art. no.	Description	PU	Weight	Price
030052	MASTERTUBE installation set 40 m MASTERTUBE injection hose 20 fastening packers 200 plastic fastening clips type A 100 metal clips with nails 10 hose connectors 1 roll of filament tape	1 bag = 1 set	8.40 kg per set	€645.00 per set

Injection hose and accessories

Art. no.	Description	PU	Secondary packaging	Weight	Price
030060 	Fastening packer incl. nipple, for fastening of injection hose to the formwork, Colour of packer: black, 10 red plugs, 10 white plugs, for resin injection	1 bag of 20 pcs.	25 bags per carton	0.50 kg per bag	€4.15 per pc.
030362 	Plastic foam for fastening packer Diameter 35 mm, thickness 20 mm, self-adhesive, 10 pcs. white, 10 pcs. anthracite	1 bag of 20 pcs.		0.05 kg per bag	€0.55 per pc.
030065 	Fixing spider for fixing the fastening packer to the reinforcement	1 pc.		0.11 kg per pc.	€7.60 per pc.
030075 	Plastic fastening clip type A for pressing into the fresh concrete or into Ø 8 mm bore holes, distance between clips: 15 cm	1 bag of 100 pcs.	25 bags per sack	0.29 kg per bag	€21.55 100 pcs.
030070 	Plastic fastening clip type B for pressing into the fresh concrete or into Ø 8 mm bore holes, distance between clips: 15 cm	1 bag of 100 pcs.	25 bags per sack	0.29 kg per bag	€18.80 100 pcs.
030080 	Metal clip with pre-fitted nail for all common nailguns, for firing and nailing, distance between clips: 15 cm	1 carton contains 100 pcs.		1.80 kg per carton	€0.65 per pc.
030081 	Metal clip without nail	1 carton of 100 pcs.		1.40 kg per carton	€0.30 per pc.
030083 	Nail plug 5 x 40 mm borehole Ø 5 mm	1 carton of 200 pcs.		0.60 kg per carton	€8.90 100 pcs.
030072 	Fastening grids for MASTERTUBE 25 m per carton (25 grids of 1 m)	1 carton		1.80 kg per carton	€2.05/m

Injection hose and accessories

Art. no.	Description	PU	Weight	Price
030100	Hose connector for hose extension and connection of oddments   	1 bag of 10 pcs.	0.04 kg per bag	€1.85 per pc.
030102 030104	Ventilation hose, fabric hose blue-transparent round, size: 5/11 mm red-transparent round, size: 5/11 mm 	1 roll contains 50 m	4.85 kg 4.85 kg per roll	€2.60/m €2.60/m
030112 030114	Injection end pieces incl. sealing plug and hose connector Length: 50 cm blue-transparent round 5/11 mm red-transparent round 5/11 mm  	1 bag of 10 pcs. 1 bag of 10 pcs.	0.50 kg PU 0.50 kg PU	€5.85 per pc. €5.85 per pc.
030096	Sealing plugs for injection end pieces and ventilation hose 	1 bag of 20 pcs.	0.006 kg per bag	€0.55 per pc.
030101	Hose bushing for gluing with superglue 	1 bag of 20 pcs.	0.02 kg per bag	€0.55 per pc.
030125	Superglue bottle 10 ml 	1 bag of 10 pcs.	0.21 kg per bag	€5.20 per pc.
030350	Storage box for ventilation hose      <p>Nail on the formwork support</p> <p>Clip on the storage box with inlets open</p> <p>Introduce the ventilation hoses on the left and right</p> <p>Ready for concrete placement</p>	1 bag of 10 pcs.	0.55 kg per bag	€4.85 per pc.
030120	Shrink-on sleeve, length 10 cm for securing connection points 	1 bag of 20 pcs.	0.04 kg per bag	€2.60 per pc.
030140	Hand-lever press 500 ccm for resin injection 	1 pc.	1.00 kg per pc.	€25.15 per pc.

Injection hose and accessories

Art. no.	Description	PU	Weight	Price
030150	 Reinforced hose L 300 mm incl. gripping head	1 pc.	0.09 kg per pc.	€13.60 per pc.
030160	 Gripping head	1 pc.	0.03 kg per pc.	€5.90 per pc.
030165	 Manometer 400 bar with T piece incl. connecting tube and adapter	1 pc.	0.26 kg per pc.	€72.50 per pc.
030155	 Replacement seal for hand-lever press	1 pc.	0.01 kg	€1.85 per pc.
030130	 Injection packer incl. nipple for injection via ventilation hose or injection hose	1 bag of 10 pcs.	0.16 kg per bag	€4.40 per pc.
030135	 Steel hose packer incl. nipple for injection via ventilation hose or injection hose	1 bag of 10 pcs.	0.19 kg per bag	€4.40 per pc.
030170	 Measuring beaker 3 l	1 pc.	0.26 kg per pc.	€22.65 per pc.
030090	 Filament tape roll width: 25 mm, roll length: 50 m to safeguard the hose ends	1 carton of 36 pcs.	0.17 kg per roll	€5.15 per roll
030355	 Connection thread for fastening packer Length: 35 mm The connection thread is screwed into the fastening packer to facilitate mineral injection.	1 bag of 10 pcs.	0.08 kg/bag	€1.80 per pc.
030360	 Attachment for connection thread The attachment is screwed onto the connection thread. The injection pump can be connected with a sliding coupling or spring lock.	1 bag of 10 pcs.	0.20 kg/bag	€5.50 per pc.
030063	 Nipple, extra	1 bag of 100 pcs.	0.46 kg/bag	€0.80 per pc.

PROTECT Resin system

Injection resins, adhesives and cleaning agents for injection of injection hoses and injection packers and pressure water-tight bonding of fibre cement plugs.

PROTECT PUR resin

Swellable polyurethane resin for hose and crack injection

CE label, low viscosity and provides a permanently elastic seal; long processing time of approx. 100 min. at +20°C



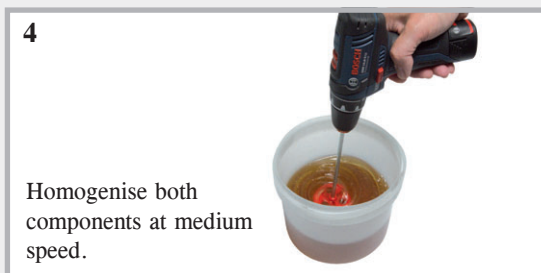
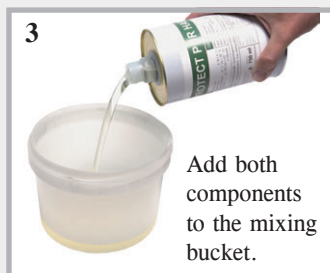
Art. no.	Description	PU	Secondary packaging	Weight	Price
040015	PROTECT PUR resin	1 l combination can: (750 ml component A + 250 ml component B)	6 cans per carton	1.30 kg per can	€21.25 per l
040018	PROTECT PUR resin	10 l container: (7.5 l component A + 2.5 l component B)		11.50 kg per container	€15.70 per l

Application

All resins must be very well homogenised when stirred in.
Example - PROTECT PUR resin:

For detailed descriptions and work instructions refer to our product descriptions which you can request from us.

Resins and adhesives cannot be shipped at temperatures below +5°C.



PROTECT foam resin

Low-viscosity polyurethane-based foam

Immediately stops the inflow of water; rapid expansion with high increase in volume; Satisfies UBA guideline for contact with potable water; reaction time upon contact with water approx. 50 seconds; Volume increase of up to 3500% upon contact with water;



Art. no.	Description	PU	Secondary packaging	Weight	Price
040050	PROTECT Foam resin	1 l combination can: (875 ml component A + 125 ml component B)	6 cans per carton	1.35 kg per can	€31.65 per l

PROTECT EP resin

Epoxy resin for non-positive seals

Non-positive filling of cracks and joints;
Injection into injection hoses;
Suitable for dry and wet substrates;
Processing time approx. 45 min. at +20°C



Art. no.	Description	PU	Secondary packaging	Weight	Price
040020	PROTECT EP resin	1 l combination can: (800 ml component A + 200 ml component B)	6 cans per carton	1.30 kg per can	€27.00 per l

PROTECT Clean

Cleaning agent

For cleaning of polyurethane and epoxy resin prior to curing



Art. no.	Description	PU	Secondary packaging	Weight	Price
040045	PROTECT Clean	1 can 1 l	12 cans per carton	1.10 kg per can	€10.15 per l
040040	PROTECT Clean	1 canister 10 l		10.00 kg per canister	€8.60 per l

Universal concrete adhesive

PROTECT Easy 1K



NEW! Single-component polymer-based concrete adhesive

For water-impermeable bonding
of fibre cement distance tubes.
Processing takes approx. 20 min. at +23°C;
Resistant to all normal uncontaminated groundwater.



Tested for
impermeability
up to 50 m
water column.
Suitable
for all fibre
cement dis-
tance tubes.

Art. no.	Description	PU	Secondary packaging	Weight	Price
040030	PROTECT Easy 1K in resealable aluminium bag	1 set: (3 x 800g aluminium bag + 1 x processing cup + 1 x fastening clip)	10 sets / carton 18 cartons per pallet	2.54 kg per set	€20.70 / kg €16.56 Aluminium bag 800g

PROTECT BK 2K



Solvent-free epoxy-based concrete adhesive

For water-impermeable bonding and non-positive connection of concrete components.
Processing time approx. 60 min. at +20°C

Resistances of PROTECT BK once cured:

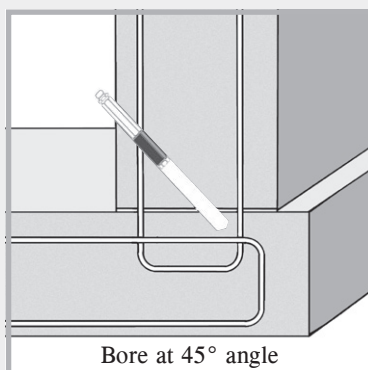
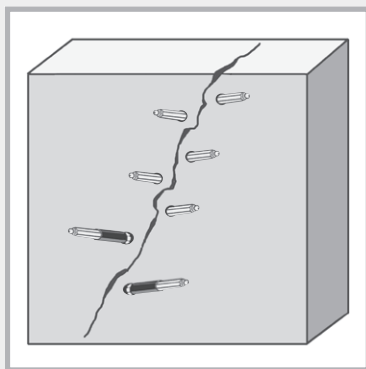
Diluted acids, mineral oil, lubricants and fuels, saltwater, wastewater, large number of
alkalis and solvents, test of suitability for contact with drinking water.



Tested for
impermeability
up to 70 m
water column
Suitable
for all fibre
cement dis-
tance tubes.

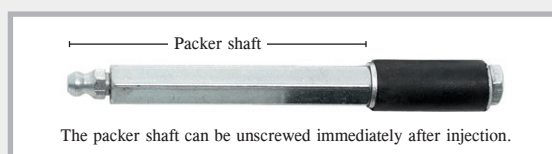
Art. no.	Description	PU	Secondary packaging	Weight	Price
040100	PROTECT BK For pressure water-tight sealing of fibre cement distance tubes.	1 kg combination can: (0.5 kg component A + 0.5 kg component B)	10 cans per carton 28 cartons per pallet	1.20 kg per can	€20.70 / kg

Injection packers + surface packers



Art. no.	Screw injection packer incl. nipple/sizes	Drill bit Ø	PU	Weight	Price
030185	10/70 mm	10 mm	1 carton of 100 pcs.	1.90 kg/ctn.	€2.10/pc.
030187	10/100 mm	10 mm	1 carton of 100 pcs.	2.70 kg/ctn.	€2.20/pc.
030183	13/80 mm	14 mm	1 carton of 100 pcs.	2.90 kg/ctn.	€2.25/pc.
030180	13/100 mm	14 mm	1 carton of 100 pcs.	4.60 kg/ctn.	€2.30/pc.
030181	13/170 mm	14 mm	1 carton of 100 pcs.	7.00 kg/ctn.	€3.80/pc.
030182	13/250 mm	14 mm	1 carton of 100 pcs.	10.50 kg/ctn.	€5.00/pc.

One day site packer



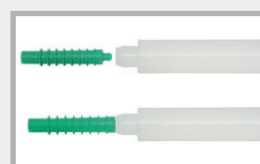
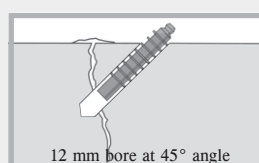
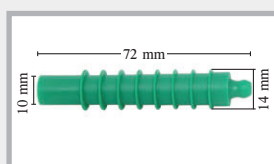
Art. no.	One day site packer incl. nipple/sizes	Drill bit Ø	PU	Weight	Price
030188	10/110 mm	10 mm	1 carton of 100 pcs.	3.80 kg/ctn.	€2.95/pc.
030189	13/115 mm	14 mm	1 carton of 100 pcs.	5.20 kg/ctn.	€3.05/pc.

Surface packer










Art. no.	Description	PU	Weight	Price
030200	Plastic surface packers, washer diameter 5 cm	1 bag of 100 pcs.	1.75 kg per bag	€2.55 per pc.

Plastic injector



Art. no.	Description	PU	Weight	Price
030210	Plastic injector with non-return ball	1 bag of 200 pcs.	0.09 kg per bag	€0.90 per pc.
030215	Impact stud	1 pc.	0.07 kg/pc.	€8.30/pc.

LIDOL concrete release agent

Art. no.	Description	PU	Secondary packaging	Weight	Price	
040310	LIDOL MULTI	1 canister 20 l	30 canisters per pallet	18.5 kg per canister	€3.45/l	 Drum
040315	LIDOL MULTI Universal release agent for all common types of formwork	1 canister 30 l	24 canisters per pallet	27.5 kg per canister	€3.45/l	
040320	LIDOL MULTI	1 drum 200 l with integrated faucet	2 drums per pallet	191.0 kg per drum	€3.25/l	
040330	LIDOL BIO  Universal release agent for all common types of formwork	1 canister 20 l	30 canisters per pallet	18.5 kg per canister	€4.30/l	 30 l canister
040335	LIDOL BIO  Rapidly biodegradable	1 canister 30 l	24 canisters per pallet	27.5 kg per canister	€4.30/l	
040340	LIDOL BIO  Environmental label "Blauer Engel"	1 drum 200 l with integrated faucet	2 drums per pallet	191.0 kg per drum	€4.10/l	
040350	TECCO 10 l compression sprayer with fine spray nozzle	1 pc.		6.2 kg per pc.	€236.00 per pc.	 20 l canister

LIDOL concrete release agents are environmentally sound and biodegradable or highly biodegradable formwork release agents. Our range includes 200 litre drums as well as 20 litre and 30 litre canisters.

LIDOL concrete release agents are universally applicable release agents which can be used for all common types of formwork in building construction.

Formwork type

Use of LIDOL

Betoplan	YES
Magnoplan	YES
NOE-Form	YES
Struktoplan	YES
Plastic facing formwork	YES
Timber formwork, planed sucking	YES
Timber formwork, unplanned sucking	YES



LIDOL MULTI

LIDOL MULTI is an environmentally sound universal release agent

The application of LIDOL MULTI to the formwork prevents the formwork from coming into contact with the concrete.

The formwork can therefore be easily stripped.

Applications:

- For all common formwork types
- With fair-faced concrete
- When coating concrete surfaces with plaster, stucco or similar material, e.g. wallpaper, paint, ceramic
- Does not contain corrosion protection additives, corrosion protection is provided by mineral oils



Environmental aspects:

- Water hazard class 1 = low hazard to water
- Not subject to mandatory labelling
- Flashpoint > +120°C
- Neutral odour

Application:

LIDOL MULTI is not sensitive to frost and can be used without problems in all weather conditions. The release agent can be applied by spraying, brushing or rolling.

The most economical application method is using the TECCO compression sprayer.

Formwork type	Yield per 1 litre of LIDOL MULTI
formwork panels	approx. 80 m ²
planed timber surface	approx. 40 m ²
unplaned timber surface	approx. 30 m ²



LIDOL BIO



LIDOL BIO is an environmentally sound and highly biodegradable universal release agent

Special award:

Due to its high environmental compatibility, LIDOL BIO was awarded the environmental label “Blauer Engel” by RAL Deutsches Institut für Gütesicherung und Kennzeichnung e.V (German Institute for Quality Assurance and Labelling).



Applications:

- In water protection areas and zones with environmental stipulations
- For all common formwork types
- With fair-faced concrete
- When coating concrete surfaces with plaster, stucco or similar material, e.g. wallpaper, paint, ceramic

Environmental aspects:

- Water hazard class 1 = low hazard to water, highly biodegradable
- Not subject to mandatory labelling
- Flashpoint $> +120^{\circ}\text{C}$
- Neutral odour



Application:

LIDOL BIO is not sensitive to frost and can be used without problems in all weather conditions. The release agent can be applied by spraying, brushing or rolling. The most economical application method is using the TECCO compression sprayer.



Formwork type	Yield per 1 litre of LIDOL BIO
formwork panels	approx. 75 m ²
planed timber surface	approx. 35 m ²
unplaned timber surface	approx. 25 m ²

TECCO 10 I

Compression sprayer with fine filter for economical application of concrete release agents.

Structure:

- Steel container with polyester coating
- 2.5 m spiral hose with safety lock
- Flat jet nozzle with fine filter
- Sight glass for level monitoring
- Oil-resistant seals
- Integrated spare parts compartment with spare seals and O-rings



Mastertec EasySeal 1K

NEW! Single-component,
solvent-free, water-free and
bitumen-free structural waterproofing



YouTube

Product description

Mastertec EasySeal 1K is one of the most modern and effective external waterproofing product for water-tight structures. Modified polymers form the basis for the product. They have an extremely high adhesive force on multiple substrates and are thus the prerequisite for a high-pressure seal. Application is simple, quick and cost-efficient.



Product characteristics

- Modified single-component polymer
- Colour grey
- Solvent-free, water-free and bitumen-free
- Neutral odour
- Very low emissions
- Water hazard class 1 – low hazard to water
- Storable for 12 months frost-free
- Protect against frost during transportation

Technical data

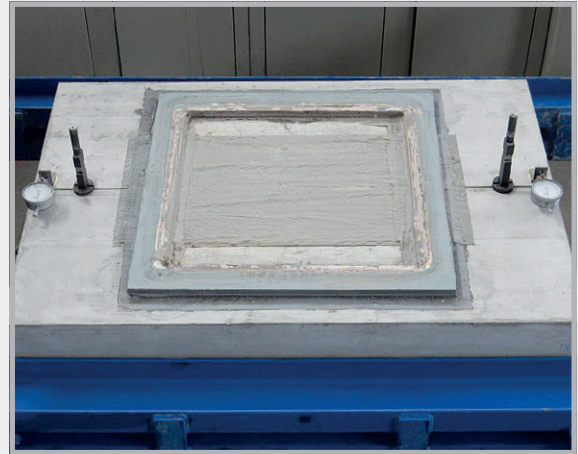
Testing:	High-pressure 80 m water column
Certificate:	General Building Supervisory Test Certificate
Crack width:	Up to 3 mm
Application temperature:	0°C to +35°C
Component temperature:	min. +2°C
Thermal resistance:	up to +70°C
Rain-proof:	immediately at +20°C At lower temperatures after approximately 3 hours
Completely dry:	after approximately 24 hours at +20°C and 50% relative air humidity The setting time may be longer at lower temperatures and lower air humidity.
Usage:	approximately 1.20 kg/m with 2 coats and a seal of approximately 32 cm in width; layer thickness: approximately 1.2 mm depending on application



Tests and resistance



Here you see the specimen after the initial test with a joint width of 1 mm. The joint is widened to 3 mm by driving in wedges.



Specimen on 3 mm widened joint. After widening the joint, the pressure vessel was fitted and pressurised with 8 bar.

- Test pressure 80 m water column
- Crack width 3 mm
- Good UV resistance
- Very good resistance to alkali
- Bitumen-compatible: Can be applied to bitumen or plastic-modified thick coating. The carrying capacity of the substrate must be observed.
- Resistant to common liquids which are aggressive to concrete
- Weatherproof
- Further processing with insulation is possible (fastened with insulation adhesive)
- Prior to filling, protect the external waterproofing against mechanical damage.



A base plaster can be applied to Mastertec EasySeal 1K under the following conditions:

- Transition zone: 15-20 cm above and below the ground edge
- A thin coating of Mastertec EasySeal1K must be applied to this 30-40 cm area, and the full surface sprinkled with quartz sand.
- Tile adhesive can be used as the keying surface/plaster base, and is applied with a toothed spatula with 6-8 mm teeth.
- To reduce cracking in the transition zone, the base plaster must be reinforced with a suitable fabric.

Preparing the joint and the non-woven



The butt joints on the components are filled and the surface is cleaned to remove any loose parts before coating.



The joint is coated to a width of approximately 32 cm.
The non-woven can be cut to the desired length.

Application of Mastertec EasySeal 1K

- Immediately ready for processing on a clean substrate from the bucket without mixing
- Suitable for brushing or rolling on
- Also adheres to slightly damp substrate
- Structure:
 - a) First application with Mastertec EasySeal 1K
 - b) Rolling in of the Mastertec EasySeal 1K non-woven
 - c) Covering layer of Mastertec EasySeal 1K after approx. 2-3 hours
- The construction site can usually be completed in a single day. No second visit required.



Coating work



Open the bags and pour the coating into the bucket.



Apply the first coating layer.

Layer thickness: approximately 1.2 mm

Usage: approximately 0.6 kg per metre/joint



There is a brush and corner roller for the fillet and other areas.



Align and gently press on the non-woven.



Roll the non-woven into the coating completely with the pressure roller.

This working step makes it possible to apply the second layer after approximately 2-3 hours, depending on the temperature and air humidity.



Apply the second coating layer.

Layer thickness: approximately 1.2 mm

Usage: approximately 0.6 kg per metre/joint

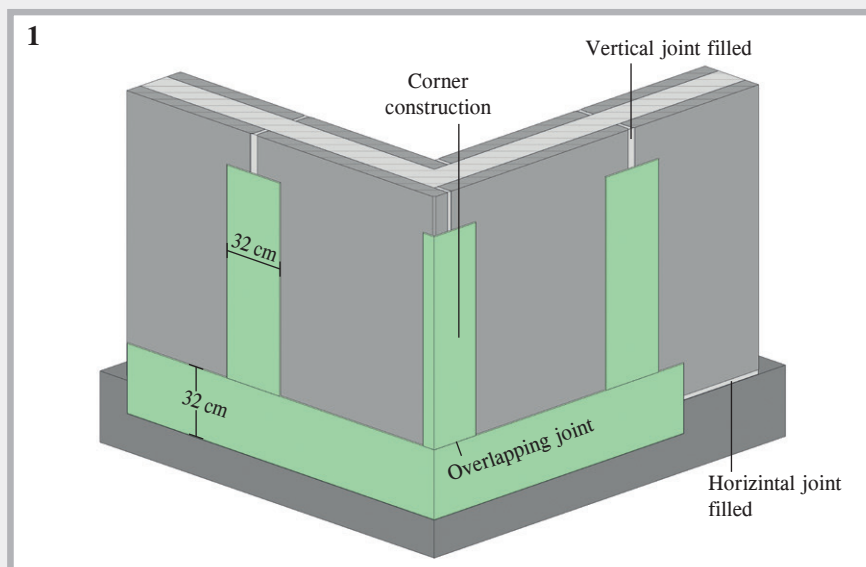
The edge area of the non-woven must be completely covered.

Installation of Mastertec EasySeal 1K

Mastertec EasySeal 1K

Joint 1

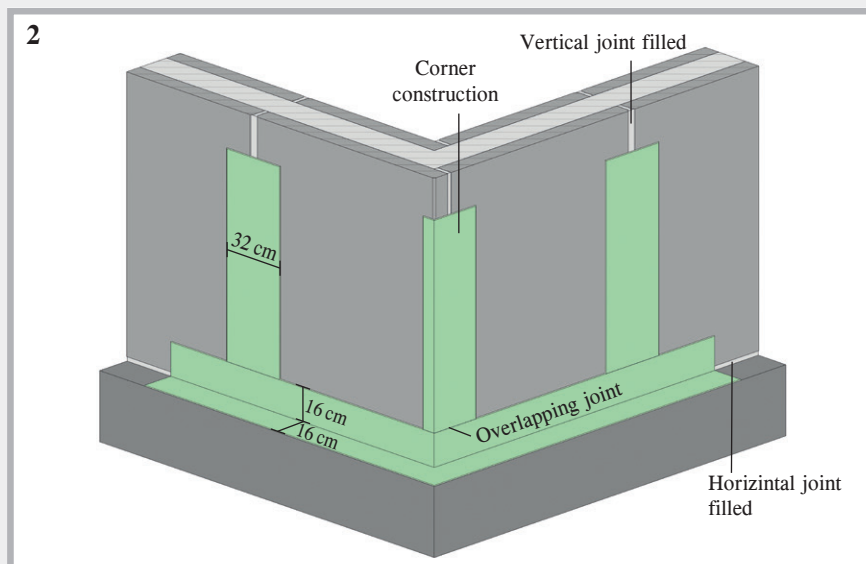
Foundation/wall connection
without fillet



Mastertec EasySeal 1K

Joint 2

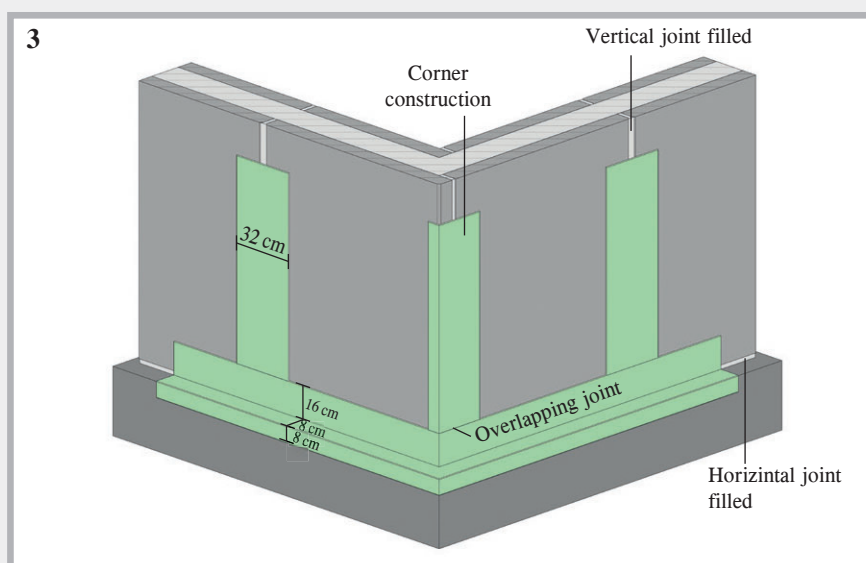
Foundation/wall connection
with wide fillet



Mastertec EasySeal 1K

Joint 3

Foundation/wall connection
with narrow fillet

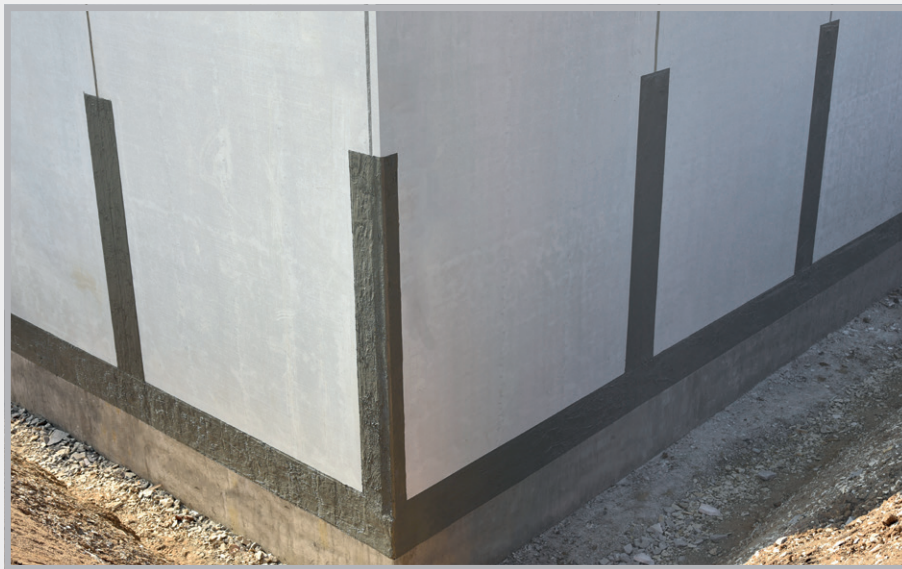


Every overlapping joint must be implemented with an overlap length of the non-woven webs of at least 10 cm. If the joints cross (T or cross joint), the vertical joints first have to be sealed off. The seal on the horizontal joints then overlays the overlap area of the vertical joint.

At the construction site



Sealed horizontal joints
and vertical joints



Sealed horizontal joint

MASTERTUBE

Injection hose systems



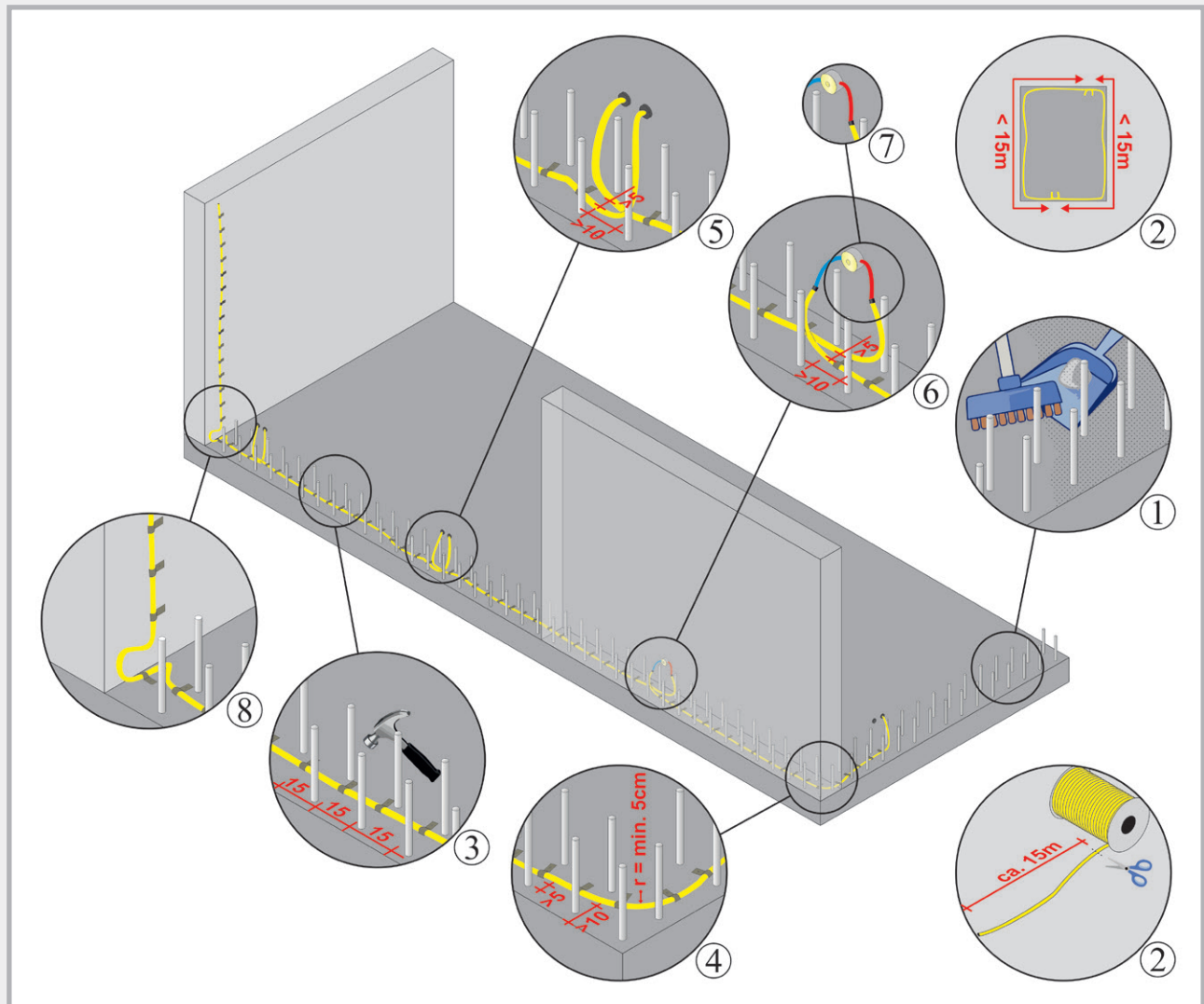
The MASTERTUBE “YELLOW” and MASTERTUBE injection hoses make construction joints watertight.

The form and structure of the hose profiles ensure a particularly secure and even filling of shrinkage gaps and damaged spots.



	MASTERTUBE YELLOW	MASTERTUBE Injection hose
Very high water pressure tests	50 m water column	50 m water column
For injection with polyurethane resin	tested	tested
For multiple injection with acrylate	tested	tested
For multiple injection with cement suspension	tested	–
Additional 15 m circulation with polyurethane resin	tested	tested
Even discharge of injection material	tested	tested
No sintering during concreting	tested	tested
Suitable for zones with frequently varying water levels	tested	tested
All-weather installation	-10°C to + 60°C	-10°C to + 60°C
Extremely straightforward installation	Used on building sites for more than 10 years	Used on building sites for more than 20 years
Accessories	Comprehensive system	Comprehensive system

Installation and injection



1. Clean the surface on which the injection hose is routed to remove loose dirt. Professionally smooth out excessive unevenness, e.g. cavities, ensuring friction-locked adhesion.
2. Plan injection sections, maximum length incl. injection end pieces ≤ 15 m, shorten hose using a suitable cutting tool. When using the MASTERTUBE injection hose, mask the hose to be shortened with filament tape to prevent the braided fabric from coming loose. The hose is then cut at the centre of the filament tape.
3. It can then be fastened with clips inserted into the fresh concrete. The hose is clipped on underneath once the concrete has cured. It can be fastened to a solid surface using metal clips or fastening grids which are nailed to it.
The distance between the fixing clips or metal clips should not be more than 15 cm. This ensures the hose is always in contact with the construction joint. The hose must not float or be clear of the supporting surface at any point.
4. The distance from the surrounding reinforcement rods should be at least 5 cm.
Ensure a minimum distance of 10 cm from the edge on all sides. The minimum bending radius is 5 cm
5. Successive injection hose sections must overlap by at least 10 cm to ensure continuous injection of the joint.
Injection hoses running parallel to one another must be at least 5 cm apart. Otherwise during injection of one hose, the other could also be filled and subsequently may no longer be injectable.

6. The injection hose can either be directly connected to our fastening packers which are mounted on the formwork or routed via injection end pieces to a storage box. The connection should be as close as possible to a 90° angle to the wall.
The storage boxes or fastening packers must be attached so they can subsequently be accessed without difficulty at any time.
7. A hose connector should be used as the transition between injection hose and injection end piece. This hose connector must be cast into the concrete in order to be able to inject the injection hose correctly later on.
8. At the foundation/wall transition, the injection hose must be routed right into the corner of the joint and routed upwards via a loop.
9. If injection hoses cross over and are a distance of ≤ 5 cm apart, adhesive tape must be wound round one of the injection hoses in the area of the intersection for a distance of 8-10 cm. This prevents accidental injection of the other injection hose.
10. Once the concrete has cured, 28 days after concreting at the earliest, the joints can be injected via the fastening packer or injection end pieces in the storage box.
11. The DBV code of practise: Injection hose systems and swellable linings for construction joints (January 2010) must be observed.

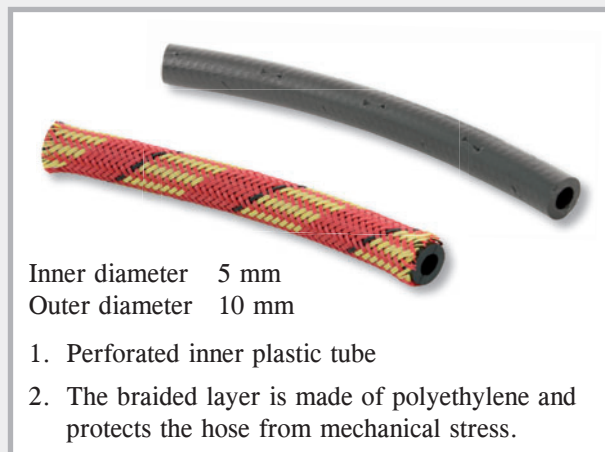
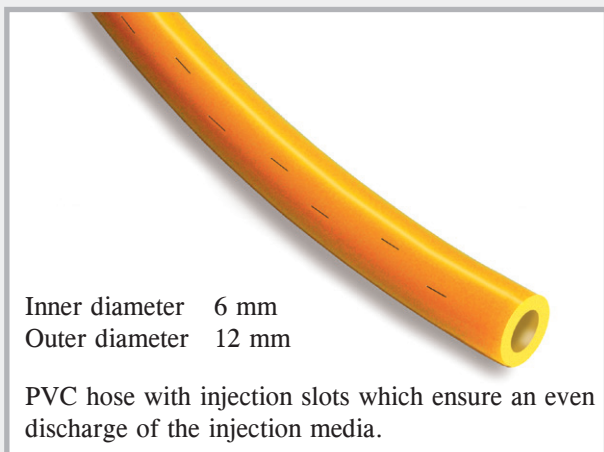
Two systems with 100% reliability



Roll length 100 m



Roll length 100 m

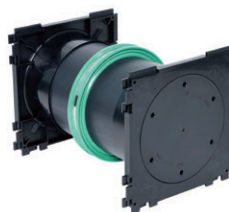


PRESSURE WATER-TIGHT SERVICE DUCTS



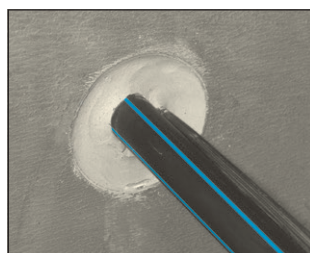
RONDO sealing collars

pages 74 – 78



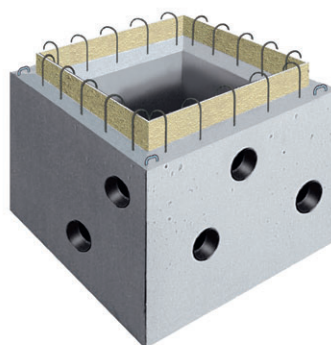
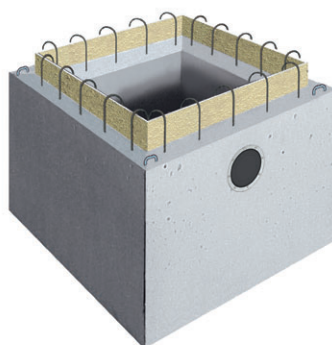
Lining pipes & pipe bushings

pages 78 – 94



Gasket inserts, FLEX 2000 & modular seals

pages 95 – 101



Pump sumps

pages 102 – 106

RONDO Standard sealing collar



YouTube



Dimensions

Technical details pages 77 – 78

NEW

Art. no.	Type	for pipe outer diameters mm	Suitable for outer dia. from (mm) to (mm)	PU	Secondary packaging	Weight per pc.	Price per pc.
090890	RO 10	For lightning protection round conductors	8 10	1 pc.	Carton of 100 pcs.	0.13 kg	€18.45
090892	RO flat	For earthing strap	30x3.5 + 30x3	1 pc.		0.15 kg	€19.55
090988	RO EFP	For hexagon fixed earthing terminal		1 pc.	Bag of 25 pcs.	0.04 kg	€8.00
090900	RO 25	25	25 25	1 pc.		0.25 kg	€20.50
090902	RO 32	32	31 32	1 pc.		0.25 kg	€20.85
090904	RO 40	40	39 42	1 pc.		0.26 kg	€21.45
090906	RO 50	50	48 53	1 pc.		0.29 kg	€21.75
090908	RO 63	63	61 64	1 pc.		0.32 kg	€21.95
090910	RO 75	75	72 80	1 pc.		0.36 kg	€22.15
090912	RO 90	90	87 92	1 pc.		0.45 kg	€22.50
090914	RO 110	Sewage pipe DN 100 110	107 115	1 pc.	Carton of 50 pcs.	0.48 kg	€22.70
090916	RO 125	Sewage pipe DN 125 125	123 130	1 pc.	Carton of 40 pcs.	0.51 kg	€24.00
090918	RO 140	140	137 147	1 pc.		0.54 kg	€26.05
090920	RO 160	Sewage pipe DN 150 160	157 166	1 pc.	Carton of 35 pcs.	0.62 kg	€27.30
090921	RO 170	170	167 177	1 pc.		0.66 kg	€28.00
090922	RO 180	180	177 187	1 pc.		0.68 kg	€28.75
090924	RO 200	Sewage pipe DN 200 200	197 207	1 pc.	Carton of 30 pcs.	0.70 kg	€30.00
090926	RO 225	225	220 230	1 pc.		0.81 kg	€31.70
090928	RO 250	Sewage pipe DN 250 250	245 260	1 pc.		0.89 kg	€32.05
090930	RO 280	280	275 290	1 pc.		0.92 kg	€37.85
090932	RO 315	Sewage pipe DN 300 315	310 324	1 pc.		1.07 kg	€39.50
090934	RO 355	355	350 365	1 pc.		1.18 kg	€44.90
090936	RO 400	Sewage pipe DN 400 400	395 410	1 pc.		1.31 kg	€47.20
090938	RO 450	450	440 460	1 pc.		1.90 kg	€61.25
090940	RO 500	Sewage pipe DN 500 500	495 515	1 pc.		2.15 kg	€62.95
090942	RO 560	560	555 580	1 pc.		2.60 kg	€68.15
090944	RO 630	630	625 650	1 pc.		2.90 kg	€74.30
090946	RO 710	710	705 735	1 pc.		3.00 kg	€85.00
090948	RO 800	800	795 830	1 pc.		3.40 kg	€92.30
090950	RO 900	900	895 930	1 pc.		4.25 kg	€101.85
090952	RO 1000	1000	995 1030	1 pc.		4.45 kg	€159.70
090954	RO 1200	1200	1195 1240	1 pc.		5.75 kg	€194.05

The sealing collars are even easier to install if placed in warm water beforehand (10 minutes).

RONDO Protect



The sealing collar with maximum media and pressure resistance

NEW! The RONDO Protect sealing collar offers the following advantages compared to the RONDO Standard:

Water pressure test

- High-pressure test up to 80 m water column

Resistance

In addition to use in agricultural slurry/liquid manure/silage effluent systems and biogas systems, the red TPE mixture offers effective protection against many aggressive media, e.g.:

- Animal excretions
- Diluted sulphuric acid
- Silage effluent
- Methane gas



Dimensions

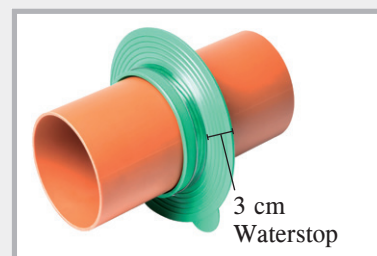
Technical details pages 77 – 78

Art. no.	Type	for pipe outer diameters mm	Suitable for outer dia. from (mm) to (mm)	PU	Weight per pc.	Price per pc.
091225	ROPRO 10	For lightning protection round conductors	8 10	1 pc.	0.13 kg	€26.75
091226	ROPRO flat	For earthing strap	30x3.5 + 30x3	1 pc.	0.15 kg	€28.10
091227	ROPRO 25	25	25 25	1 pc.	0.25 kg	€29.45
091228	ROPRO 32	32	31 32	1 pc.	0.25 kg	€30.20
091229	ROPRO 40	40	39 42	1 pc.	0.26 kg	€30.80
091230	ROPRO 50	50	48 53	1 pc.	0.29 kg	€31.25
091231	ROPRO 63	63	61 64	1 pc.	0.32 kg	€31.85
091232	ROPRO 75	75	72 80	1 pc.	0.36 kg	€32.15
091233	ROPRO 90	90	87 92	1 pc.	0.45 kg	€32.55
091234	ROPRO 110	Sewage pipe DN 100 110	107 115	1 pc.	0.48 kg	€32.90
091235	ROPRO 125	Sewage pipe DN 125 125	123 130	1 pc.	0.51 kg	€34.80
091236	ROPRO 140	140	137 147	1 pc.	0.54 kg	€37.35
091237	ROPRO 160	Sewage pipe DN 150 160	157 166	1 pc.	0.62 kg	€39.60
091238	ROPRO 170	170	167 177	1 pc.	0.66 kg	€40.20
091239	ROPRO 180	180	177 187	1 pc.	0.68 kg	€41.25
091240	ROPRO 200	Sewage pipe DN 200 200	197 207	1 pc.	0.70 kg	€43.50
091241	ROPRO 225	225	220 230	1 pc.	0.81 kg	€45.40
091242	ROPRO 250	Sewage pipe DN 250 250	245 260	1 pc.	0.89 kg	€46.00
091243	ROPRO 280	280	275 290	1 pc.	0.92 kg	€53.80
091244	ROPRO 315	Sewage pipe DN 300 315	310 324	1 pc.	1.07 kg	€46.20
091245	ROPRO 355	355	350 365	1 pc.	1.18 kg	€63.80
091246	ROPRO 400	Sewage pipe DN 400 400	395 410	1 pc.	1.31 kg	€67.10

The sealing collars are even easier to install if placed in warm water beforehand (10 minutes).

RONDO Ecco

The low-priced sealing collar
for waterproofing of pipes and cables



Dimensions

Supplied ready for installation with stainless steel fastening straps

Art. no.	Type	Suitable for outer dia. from to	PU	Secondary packaging	Weight per pc.	Price per pc.
091050	RO Ecco 110	107-115 mm	1 pc.	Carton of 80 pcs.	0.30 kg	€19.80
091053	RO Ecco 125	122-130 mm	1 pc.	Carton of 70 pcs.	0.34 kg	€21.55
091056	RO Ecco 160	157-170 mm	1 pc.	Carton of 60 pcs.	0.40 kg	€24.25
091059	RO Ecco 200	197-210 mm	1 pc.	Carton of 50 pcs.	0.47 kg	€25.85

RONDO Base



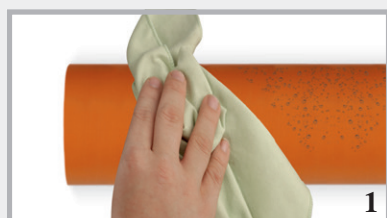
Dimensions

High-pressure sealing
collar

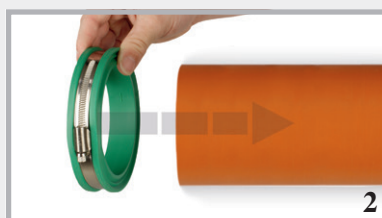
70 m water column with only
one fastening strap

Art. no.	Type	for pipe outer diameters/mm	PU	Secondary packaging	Weight per pc.	Price per pc.
090970	RO Base 90	90	1 pc.	Carton of 25 pcs.	0.13 kg	€18.30
090978	RO Base 110	110	1 pc.	Carton of 25 pcs.	0.16 kg	€18.40
090980	RO Base 125	125	1 pc.	Carton of 25 pcs.	0.17 kg	€21.50
090984	RO Base 160	160	1 pc.	Carton of 25 pcs.	0.22 kg	€23.50
090990	RO Base 200	200	1 pc.	Carton of 25 pcs.	0.24 kg	€25.50
090994	RO Base 250	250	1 pc.	Carton of 10 pcs.	0.32 kg	€32.30
090998	RO Base 315	315	1 pc.	Carton of 10 pcs.	0.40 kg	€35.20

Installation RONDO Base



Clean outside of pipe



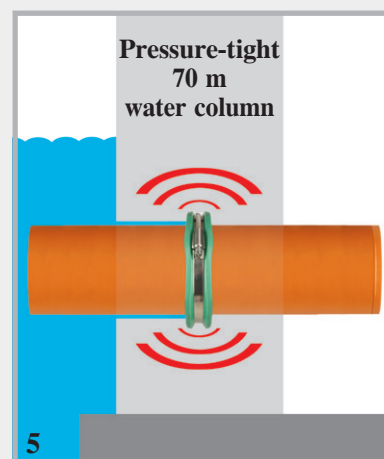
Pull on RONDO Base



Position sealing collar, ideally at
centre of wall or foundation



Tighten fastening strap to approx.
5-6 Nm.

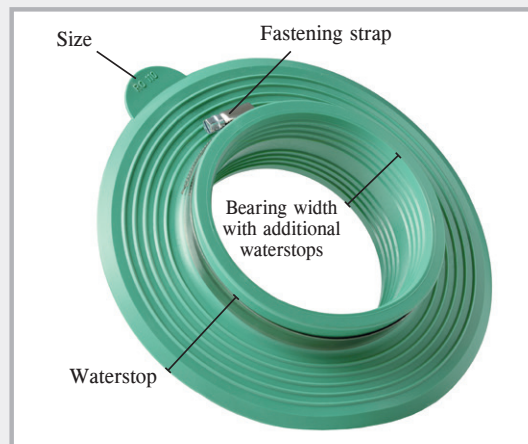


RONDO Base installation
complete

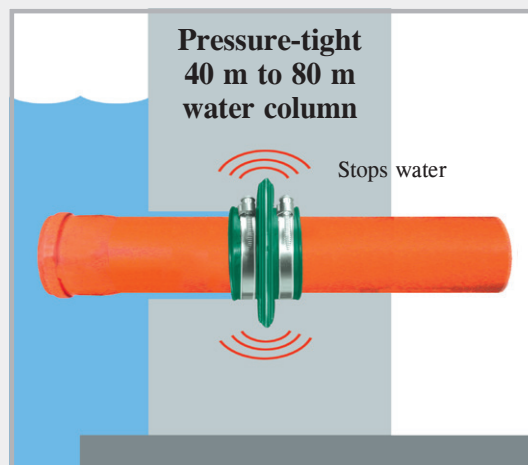
RONDO + RONDO Protect Product description

RONDO sealing collars securely seal pipes and cables made of plastic, steel, fibre cement and vitrified clay against a water column of up to **40 metres** (Standard) or **80 metres** (Protect). The bushings in concrete foundations and walls are securely sealed against groundwater and pressurised water.

	RONDO Protect	RONDO Standard	
Colour	red	green	black
Material	modified TPE	TPE	EPDM
Size	10-400 mm	10-400 mm	450-1200 mm
Height of waterstop	4 cm	4 cm	4 cm
Number of waterstops	1	1	2
Bearing width	6 cm	6 cm	8 cm
Pressure test	80 m water column	50 m water column	40 m water column
Resistance			
Diluted acids	✓	✓	✓
Alkalis	✓	✓	✓
Ground water	✓	✓	✓
Radon	✓	✓	✓
Liquid manure	✓	✓	✓
Slurry	✓	✓	✓
Fermentation mash	✓		
Methane gas	✓		
Animal excretions	✓		
Silage effluent	✓		
Diluted sulphuric acid	✓		
Further resistances are available on request			



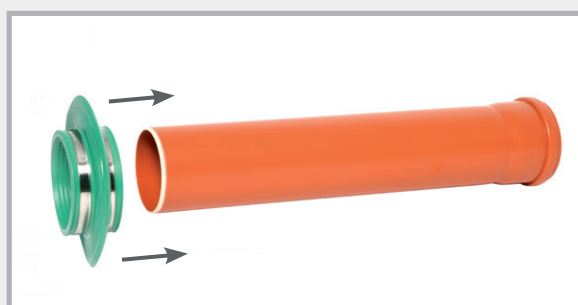
The sealing collar is supplied with fastening straps, ready for installation



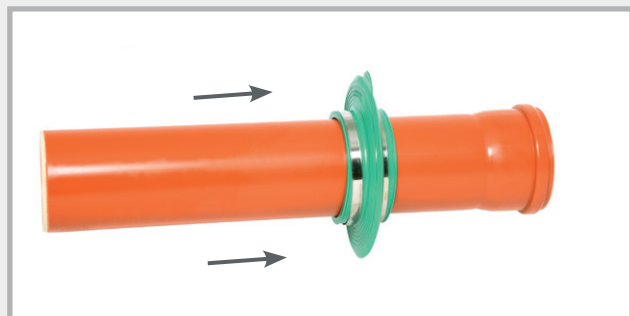
Installation of RONDO sealing collars



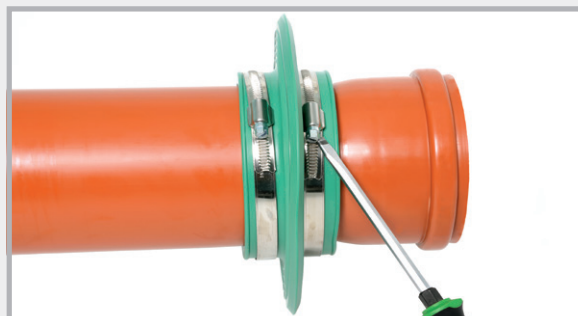
Sewage pipe and RONDO 110



Pushing on the sealing collar



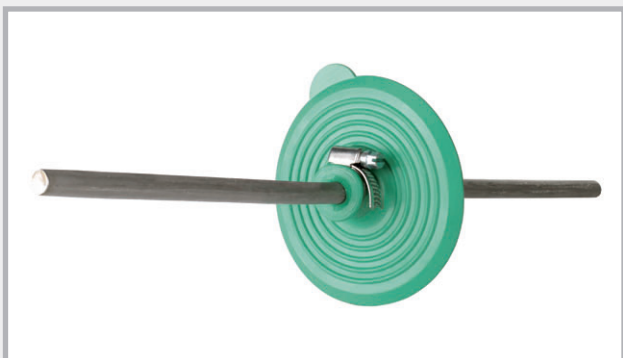
Positioning the sealing collar



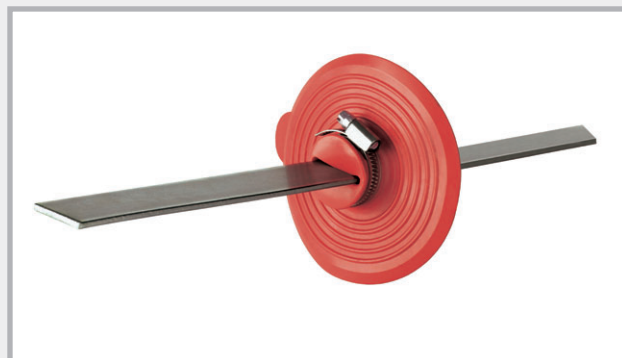
Securing by tightening the fastening straps

The surface of the pipe should be cleaned, if dirty.

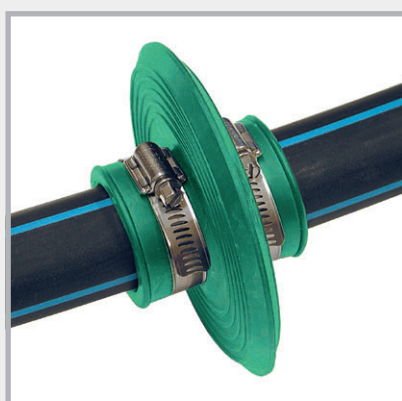
RONDO Sealing Collars practical applications



RONDO for lightning protection round conductor



RONDO Protect for lightning protection flat conductor



The sealing collar can be used for almost all pipe types. Regardless of whether your pipes are made of plastic, vitrified clay, concrete, cast iron, or steel – the collar ensures perfect sealing.

At the construction site



The Rondo, shortly before placement of concrete. The drainpipes are securely and permanently sealed against rising moisture.

Lining pipes

Pressure water-tight recess pipes for installation flush with formwork



FASO lining pipe



WELLO active lining pipe



DURO Plus high-pressure lining pipes + double-wall DW3 type



STEELLO stainless steel lining pipe

For the subsequent, professional introduction of pipes and lines into buildings, the use of lining pipes is essential. The built-in components are manufactured for the corresponding wall thickness, enable installation flush with the formwork and form a pressure water-tight bond with the surrounding concrete component.

They leave a circular recess with a smooth surface in the wall, into which pipes and cables can subsequently be fed then sealed with MASTER-Ring gasket inserts or MASTER-SEAL modular seals.

FASO lining pipe



Our fibre cement lining pipes are available immediately ex stock in sizes DN 80 to DN 600.

The pipe is smooth on the inside and corrugated and rough on the outside. The bond formed by the corrugated exterior of the pipe with the concrete prevents water permeation.

If you wet the lining pipes prior to placement of the concrete, the bond with the concrete will be even more effective.



FASO inner Ø mm	outer Ø mm	Standard lengths											
		200 mm	240 mm	250 mm	300 mm	350 mm	365 mm	400 mm	500 mm	600 mm	800 mm	1000 mm	1250 mm
DN 80 Weight/pc. €/pc.	120	080210 2.4 kg 18.95	080211 2.8 kg 21.05	080212 3.0 kg 21.35	080213 3.5 kg 24.05	080214 4.1 kg 33.85	080215 4.3 kg 34.15	080216 4.7 kg 35.50	080217 5.9 kg 42.05	080218 7.0 kg 50.60	080918 9.4 kg 67.35	080950 11.7 kg 84.20	080219 14.6 kg 100.95
DN 100 Weight/pc. €/pc.	140	080220 2.9 kg 24.35	080221 3.4 kg 28.70	080222 3.6 kg 30.00	080223 4.3 kg 35.30	080224 5.0 kg 41.10	080225 5.2 kg 42.45	080226 5.7 kg 46.40	080227 7.1 kg 57.45	080228 8.5 kg 68.50	080921 11.4 kg 87.70	080952 14.2 kg 109.55	080229 17.8 kg 125.50
DN 125 Weight/pc. €/pc.	165	080230 3.6 kg 29.35	080231 4.3 kg 34.45	080232 4.5 kg 35.60	080233 5.4 kg 42.15	080234 6.3 kg 48.70	080235 6.6 kg 51.00	080236 7.2 kg 55.55	080237 9.0 kg 68.60	080238 10.7 kg 81.70	080922 14.3 kg 99.60	080954 17.9 kg 125.80	080239 22.4 kg 133.50
DN 150 Weight/pc. €/pc.	190	080240 4.1 kg 38.40	080241 4.9 kg 45.50	080242 5.1 kg 47.25	080243 6.1 kg 56.10	080244 7.1 kg 64.85	080245 7.4 kg 67.45	080246 8.1 kg 73.45	080247 10.1 kg 91.05	080248 12.1 kg 108.50	080924 16.2 kg 141.10	080956 20.1 kg 173.85	080249 25.1 kg 201.20
DN 200 Weight/pc. €/pc.	250	080250 6.5 kg 43.80	080251 7.8 kg 51.70	080252 8.1 kg 53.60	080253 9.7 kg 63.70	080254 11.3 kg 73.55	080255 11.8 kg 76.50	080256 12.9 kg 83.55	080257 16.1 kg 103.20	080258 19.3 kg 123.20	080926 25.8 kg 157.40	080958 32.2 kg 196.20	080259 40.2 kg 228.45
DN 250 Weight/pc. €/pc.	300	080260 8.1 kg 53.90	080261 9.7 kg 63.05	080262 10.1 kg 65.55	080263 12.1 kg 77.55	080264 14.2 kg 89.25	080265 14.8 kg 92.80	080266 16.2 kg 101.15	080267 20.2 kg 124.95	080268 24.2 kg 148.80	080928 32.3 kg 188.85	080960 40.1 kg 236.05	080269 50.2 kg 262.60
DN 300 Weight/pc. €/pc.	350	080270 9.8 kg 59.85	080271 11.8 kg 70.75	080272 12.3 kg 73.45	080273 14.7 kg 86.60	080274 17.1 kg 99.80	080275 17.9 kg 103.65	080276 19.6 kg 113.00	080277 24.4 kg 139.30	080278 29.3 kg 165.85	080930 39.1 kg 210.45	080962 48.9 kg 263.20	080279 61.1 kg 289.30
DN 350 Weight/pc. €/pc.	400	080280 11.2 kg 80.75	080281 13.4 kg 95.10	080282 14.0 kg 98.65	080283 16.7 kg 116.55	080284 19.5 kg 134.55	080285 20.4 kg 139.85	080286 22.3 kg 152.45	080287 27.9 kg 188.20	080288 33.4 kg 223.90	080932 44.6 kg 284.25	080964 55.7 kg 355.40	080289 69.6 kg 394.80
DN 400 Weight/pc. €/pc.	460	080290 15.4 kg 111.35	080291 18.5 kg 130.90	080292 19.3 kg 135.80	080293 23.1 kg 160.55	080294 26.9 kg 185.10	080295 28.1 kg 192.25	080296 30.8 kg 209.55	080297 38.5 kg 258.75	080298 46.1 kg 307.95	080934 61.5 kg 391.05	080966 76.9 kg 488.85	080299 96.1 kg 542.25
DN 450 Weight/pc. €/pc.	510	080300 17.5 kg 127.10	080301 21.9 kg 149.60	080302 21.9 kg 155.25	080303 26.2 kg 183.45	080304 30.6 kg 211.50	080305 31.9 kg 220.00	080306 35.0 kg 239.60	080307 43.7 kg 296.05	080308 52.4 kg 352.30	080936 69.6 kg 443.95	080968 87.4 kg 559.00	080309 109.3 kg 620.30
DN 500 Weight/pc. €/pc.	570	080310 22.4 kg 150.80	080311 26.8 kg 177.30	080312 28.0 kg 183.90	080313 33.5 kg 217.55	080314 39.1 kg 250.20	080315 40.8 kg 260.20	080316 44.7 kg 283.25	080317 55.9 kg 349.60	080318 67.0 kg 416.05	080938 89.4 kg 528.20	080970 111.7 kg 660.25	080319 139.6 kg 730.60
DN 600 Weight/pc. €/pc.	670	080320 26.8 kg 171.95	080321 32.1 kg 202.00	080322 33.5 kg 209.40	080323 40.1 kg 247.10	080324 45.9 kg 284.60	080325 48.8 kg 295.95	080326 53.5 kg 321.90	080327 66.9 kg 397.20	080328 80.2 kg 472.15	080940 107.0 kg 599.40	080972 133.7 kg 749.35	080329 167.1 kg 827.40
DN 700 Weight/pc. €/pc.	780	080330 38.0 kg 297.70	080331 45.6 kg 395.45	080332 47.5 kg 411.80	080333 57.0 kg 446.10	080334 66.5 kg 502.85	080335 69.4 kg 525.00	080336 76.0 kg 530.80	080337 95.0 kg 646.25	080338 114.0 kg 738.75	080942 152.0 kg 839.25	080974 190.0 kg 940.40	080339 237.5 kg 1010.00
DN 800 Weight/pc. €/pc.	880	080340 42.5 kg 331.80	080341 51.0 kg 463.30	080342 53.2 kg 482.80	080343 63.8 kg 537.45	080344 74.7 kg 571.90	080345 77.6 kg 596.50	080346 85.0 kg 625.40	080347 106.3 kg 770.75	080348 127.5 kg 910.25	080944 170.0 kg 1027.15	080976 212.5 kg 1159.25	080349 265.6 kg 1207.50

Special lengths: Any intermediate lengths can be supplied.

Lead time for DN 700 and DN 800: 10 days

We charge the price of the next higher stock length.

DN 80 to DN 600 can be extended up to 1600 mm: 40% surcharge

Delivery: From DN 250 only by forwarding agent; up to DN 200 by parcel service with restrictions, clarify dispatch method

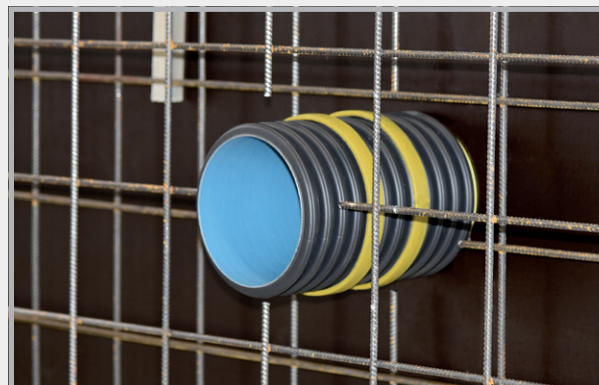
We recommend installation with closure plugs

WELLO active lining pipe



When the use of sealing collars is not possible, lining pipes are installed, which enable the subsequent water-tight lead-through of the medium pipe into the building.

The cost-efficient PE lining pipe is available at short notice ex stock in dia. 100 to 400 mm. Its inner surface is smooth. The corrugated outside ensures a firm bond with the concrete. Two swelling tapes applied centrally around the lining pipe act as waterstops.



Tested for impermeability up to 20 m water column

WELLO inner Ø mm	Standard lengths								
	200 mm	240 mm	250 mm	300 mm	350 mm	365 mm	400 mm	500 mm	600 mm
DN 100	080130	080131	080132	080133	080134	080135	080136	080137	080138
Weight/pc.	0.28 kg	0.31 kg	0.32 kg	0.35 kg	0.39 kg	0.40 kg	0.43 kg	0.50 kg	0.57 kg
€/pc.	24.90	25.40	25.40	26.70	27.75	27.75	28.70	29.60	31.00
DN 125	080140	080141	080142	080143	080144	080145	080146	080147	080148
Weight/pc.	0.33 kg	0.36 kg	0.37 kg	0.42 kg	0.46 kg	0.48 kg	0.51 kg	0.60 kg	0.69 kg
€/pc.	26.70	27.75	27.75	29.05	29.90	29.90	31.00	32.70	34.60
DN 150	080150	080151	080152	080153	080154	080155	080156	080157	080158
Weight/pc.	0.44 kg	0.49 kg	0.51 kg	0.57 kg	0.64 kg	0.66 kg	0.70 kg	0.84 kg	1.01 kg
€/pc.	28.60	29.35	29.35	30.80	32.05	32.05	33.75	35.35	37.20
DN 200	080160	080161	080162	080163	080164	080165	080166	080167	080168
Weight/pc.	0.67 kg	0.75 kg	0.77 kg	0.88 kg	0.99 kg	1.02 kg	1.10 kg	1.31 kg	1.53 kg
€/pc.	33.65	34.70	34.70	35.80	37.20	37.20	39.65	41.15	43.10
*DN 250	080170	080171	080172	080173	080174	080175	080176	080177	080178
Weight/pc.	0.94 kg	1.07 kg	1.10 kg	1.27 kg	1.43 kg	1.48 kg	1.59 kg	1.92 kg	2.24 kg
€/pc.	35.05	36.85	36.85	38.05	40.20	40.20	42.35	45.55	48.95
DN 300	080180	080181	080182	080183	080184	080185	080186	080187	080188
Weight/pc.	1.19 kg	1.36 kg	1.41 kg	1.62 kg	1.83 kg	1.90 kg	2.04 kg	2.47 kg	2.89 kg
€/pc.	40.10	41.90	41.90	46.20	49.10	49.10	49.95	54.00	58.10
*DN 350	080190	080191	080192	080193	080194	080195	080196	080197	080198
Weight/pc.	1.70 kg	1.96 kg	2.02 kg	2.35 kg	2.67 kg	2.77 kg	3.00 kg	3.65 kg	4.30 kg
€/pc.	42.65	43.40	43.40	50.05	52.50	52.50	56.05	61.30	67.30
DN 400	080200	080201	080202	080203	080204	080205	080206	080207	080208
Weight/pc.	2.14 kg	2.47 kg	2.56 kg	2.98 kg	3.40 kg	3.52 kg	3.82 kg	4.66 kg	5.50 kg
€/pc.	52.75	54.75	54.75	60.10	65.60	65.60	69.55	76.70	84.85

Special lengths: Any intermediate lengths can be supplied.

* DN 250 + DN 350 waterproofing with modular seal only

Up to length of 600 mm, the price will be that of the next higher stock length.

Maximum length of lining pipe: 2000 mm

We recommend installation with closure plugs



DURO Plus high-pressure lining pipes

DURO Plus are high pressure-resistant lining pipes for secure and permanent routing of pipes and cables in buildings. A collar which can withstand water pressures of up to 7 bar is fitted to the lining pipes at the factory.

The diameters DN 50 to DN 300 are available within a few days. When ordering, please state whether you require the lining pipes with or without plugs.



DURO Plus with and without foil flange

DURO inner Ø mm	outer Ø mm	Standard lengths											
		200 mm	240 mm	250 mm	300 mm	350 mm	365 mm	400 mm	500 mm	600 mm	800 mm	1000 mm	1200 mm
DN 50 Weight/pc. €/pc.	54	090010 0.31 kg 28.70	090013 0.37 kg 30.05	090016 0.39 kg 30.05	090019 0.46 kg 31.55	090022 0.54 kg 32.70	090025 0.56 kg 32.70	090028 0.62 kg 33.85	090031 0.78 kg 35.00	090034 0.93 kg 36.05	090037 1.24 kg 38.35	090040 1.56 kg 40.60	090043 1.87 kg 42.90
DN 80 Weight/pc. €/pc.	85	090050 0.30 kg 30.90	090053 0.36 kg 32.35	090056 0.38 kg 32.35	090059 0.45 kg 33.75	090062 0.53 kg 35.00	090065 0.55 kg 35.00	090068 0.60 kg 36.05	090071 0.76 kg 37.20	090074 0.91 kg 38.35	090077 1.21 kg 40.60	090080 1.52 kg 42.90	090083 1.82 kg 45.10
DN 100 Weight/pc. €/pc.	110	090110 0.60 kg 31.85	090113 0.72 kg 33.30	090116 0.76 kg 33.30	090119 0.91 kg 35.10	090122 1.06 kg 36.35	090125 1.10 kg 36.35	090128 1.21 kg 37.65	090131 1.52 kg 38.80	090134 1.82 kg 40.25	090137 2.43 kg 44.05	090140 3.04 kg 46.35	090143 3.64 kg 48.75
DN 125 Weight/pc. €/pc.	137	090150 0.75 kg 35.60	090153 0.90 kg 36.05	090156 0.94 kg 36.05	090159 1.12 kg 38.00	090162 1.31 kg 39.30	090165 1.37 kg 39.30	090168 1.50 kg 40.35	090171 1.88 kg 41.75	090174 2.25 kg 47.70	090177 3.00 kg 54.95	090180 3.76 kg 63.15	090183 4.51 kg 73.05
DN 150 Weight/pc. €/pc.	162	090210 0.86 kg 36.05	090213 1.03 kg 37.00	090216 1.08 kg 37.00	090219 1.29 kg 41.00	090222 1.51 kg 44.35	090225 1.57 kg 44.35	090228 1.72 kg 47.70	090231 2.16 kg 49.70	090234 2.59 kg 51.90	090237 3.45 kg 59.80	090240 4.32 kg 68.75	090243 5.18 kg 78.90
DN 200 Weight/pc. €/pc.	214	090250 1.31 kg 45.50	090253 1.57 kg 49.95	090256 1.64 kg 49.95	090259 1.96 kg 56.25	090262 2.29 kg 62.00	090265 2.39 kg 62.00	090268 2.62 kg 67.55	090271 3.28 kg 70.95	090274 3.93 kg 74.30	090277 5.24 kg 85.55	090280 6.56 kg 98.15	090283 7.87 kg 112.95
DN 250 Weight/pc. €/pc.	264	090310 1.63 kg 50.55	090313 1.95 kg 57.05	090316 2.04 kg 57.05	090319 2.44 kg 63.60	090322 2.85 kg 70.30	090325 2.97 kg 70.30	090328 3.26 kg 76.80	090331 4.08 kg 82.50	090334 4.89 kg 88.05	090337 6.52 kg 101.40	090340 8.16 kg 116.65	090343 9.79 kg 134.10
DN 300 Weight/pc. €/pc.	316	090350 2.48 kg 54.95	090353 2.98 kg 62.55	090356 3.11 kg 62.55	090359 3.73 kg 70.00	090362 4.35 kg 78.20	090365 4.54 kg 78.20	090368 4.97 kg 85.75	090371 6.22 kg 92.45	090374 7.46 kg 99.30	090377 9.95 kg 115.25	090380 12.44 kg 143.00	090383 14.92 kg 171.60

Any intermediate lengths can be supplied
Lengths up to 3000 mm are available

We charge the price of the next higher stock length

We recommend installation with closure plugs

DURO Plus high-pressure lining pipes

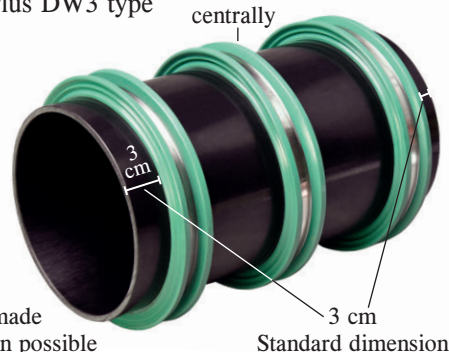
NEW! Double-wall (DW) type



DURO Plus double-wall type high-pressure lining pipes are specially designed for use in double-wall elements.

The waterstops in the edge zone prevent water permeation of the pipe bushing directly in the outer shells. The centrally mounted waterstop provides an additional seal in the core concrete.

DURO Plus pipe bushing
DURO Plus DW3 type



DURO Plus DW3 type product range

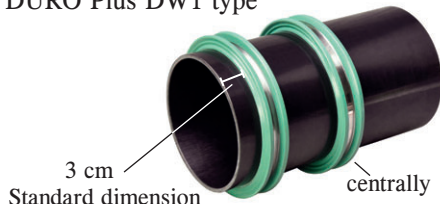
DURO-Ø DN mm	Wall thicknesses						
	200 mm	240 mm	250 mm	300 mm	350 mm	365 mm	400 mm
DN 80	090600	090602	090604	090606	090608	090610	090612
Weight/pc.	0.56 kg	0.62 kg	0.64 kg	0.71 kg	0.79 kg	0.81 kg	0.86 kg
€/pc.	44.70	46.05	46.05	47.55	48.70	48.70	49.85
DN 100	090614	090616	090618	090620	090622	090624	090626
Weight/pc.	0.92 kg	1.04 kg	1.08 kg	1.23 kg	1.38 kg	1.42 kg	1.53 kg
€/pc.	50.85	52.30	52.30	54.10	55.35	55.35	56.65
DN 125	090628	090630	090632	090634	090636	090638	090640
Weight/pc.	1.09 kg	1.24 kg	1.28 kg	1.46 kg	1.65 kg	1.71 kg	1.84 kg
€/pc.	56.60	57.05	57.05	59.00	60.30	60.30	61.35
DN 150	090642	090644	090646	090648	090650	090652	090654
Weight/pc.	1.30 kg	1.47 kg	1.52 kg	1.73 kg	1.95 kg	2.01 kg	2.16 kg
€/pc.	58.05	59.00	59.00	63.00	66.35	66.35	69.70
DN 200	090656	090658	090660	090662	090664	090666	090668
Weight/pc.	1.79 kg	2.05 kg	2.12 kg	2.44 kg	2.77 kg	2.87 kg	3.10 kg
€/pc.	77.50	81.95	81.95	88.25	94.00	94.00	99.55
DN 250	090670	090672	090674	090676	090678	090680	090682
Weight/pc.	2.27 kg	2.59 kg	2.68 kg	3.08 kg	3.49 kg	3.61 kg	3.90 kg
€/pc.	90.55	97.05	97.05	103.60	110.30	110.30	116.80
DN 300	090684	090686	090688	090690	090692	090694	090696
Weight/pc.	3.28 kg	3.78 kg	3.91 kg	4.53 kg	5.15 kg	5.34 kg	5.77 kg
€/pc.	97.95	105.55	105.55	113.00	121.20	121.20	128.75

Any intermediate lengths can be supplied
Lengths up to 3000 mm are available

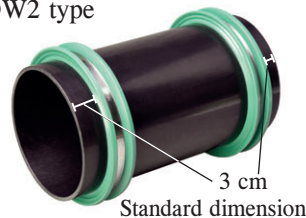
We charge the price of the next higher stock length

We recommend installation with the closure plug

Additional version:
DURO Plus DW1 type



Additional version:
DURO Plus DW2 type





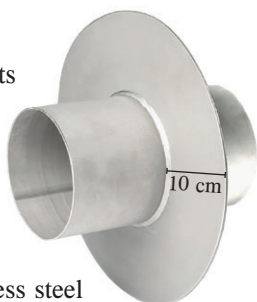
STEELO stainless steel lining pipe

with watertight centre flange against
pressurised and non-pressurised water

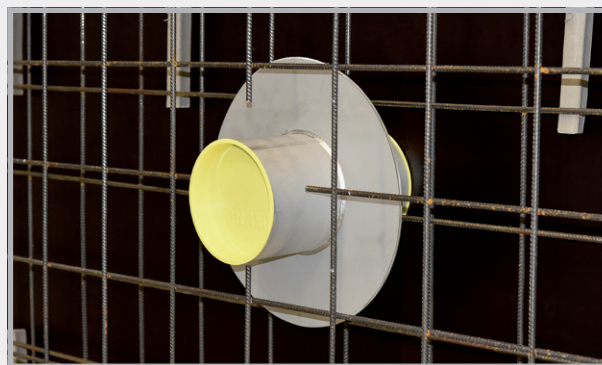
STEELO lining pipes are manufactured from V2A or V4A stainless steel. The centre flange is welded watertight.

The lining pipes are installed in locations where high stresses, e.g. chemical or thermal, are anticipated.

Suitable for
MASTER-RING
Standard gasket inserts



V2A stainless steel



Dimensions

Always supplied with 2 closure plugs with inner diameter up to 400 mm

STEELO V2A lining pipe

The sizes marked with prices are available in stock.

STEELO inner Ø mm	Standard lengths always with closure plugs							Further lengths
	200 mm	240 mm	250 mm	300 mm	350 mm	365 mm	400 mm	
DN 80 Weight/pc. €/pc.	081200 2.18 kg 160.70	081240 2.34 kg 160.70	081250 2.37 kg 160.70	081300 2.56 kg 160.70	081350 2.76 kg 171.00	081365 2.79 kg 171.00	081400 2.92 kg 171.00	on request
DN 100 Weight/pc. €/pc.	082200 2.55 kg 177.20	082240 2.75 kg 177.20	082250 2.82 kg 177.20	082300 3.05 kg 177.20	082350 3.30 kg 190.55	082365 3.38 kg 190.55	082400 3.54 kg 190.55	on request
DN 125 Weight/pc. €/pc.	083200 2.96 kg 209.10	083240 3.21 kg 209.10	083250 3.27 kg 209.10	083300 3.52 kg 209.10	083350 3.80 kg 224.55	083365 3.87 kg 224.55	083400 4.07 kg 224.55	on request
DN 150 Weight/pc. €/pc.	084200 3.43 kg 225.60	084240 3.72 kg 225.60	084250 3.84 kg 225.60	084300 4.06 kg 225.60	084350 4.42 kg 243.10	084365 4.68 kg 243.10	084400 4.78 kg 243.10	on request
DN 200 Weight/pc. €/pc.	085200 4.37 kg 288.40	085240 4.82 kg 288.40	085250 4.85 kg 288.40	085300 5.35 kg 288.40	085350 5.79 kg 308.00	085365 5.96 kg 308.00	085400 6.35 kg 308.00	on request
DN 250 Weight/pc. €/pc.	086200 5.40 kg 355.35	086240 5.65 kg 355.35	086250 6.01 kg 355.35	086300 6.54 kg 355.35	086350 6.87 kg 378.05	086365 7.44 kg 378.05	086400 7.80 kg 378.05	on request
DN 300 Weight/pc. €/pc.	087200 7.54 kg 401.70	087240 8.40 kg 401.70	087250 8.55 kg 401.70	087300 9.62 kg 401.70	087350 10.70 kg 432.60	087365 11.04 kg 432.60	087400 11.80 kg 432.60	on request
DN 400 Weight/pc. €/pc.	088200 on request	088240 on request	088250 on request	088300 on request	088350 on request	088365 on request	088400 on request	on request
DN 500 Weight/pc. €/pc.	089200 on request	089240 on request	089250 on request	089300 on request	089350 on request	089365 on request	089400 on request	on request
DN 600 Weight/pc. €/pc.	089520 on request	089524 on request	089525 on request	089530 on request	089535 on request	089536 on request	089540 on request	on request

V4A = on request

MASTERTEC MKD 150 cable bushing

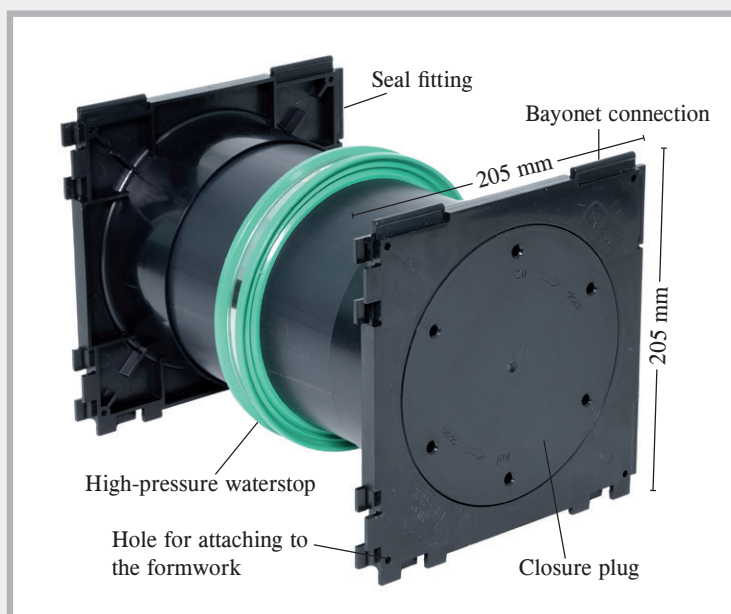
Stay flexible with the MKD 150 cable bushing

Product description

The MKD 150 cable bushing is manufactured in the corresponding wall thickness and consists of 2 seal fittings, a factory-installed high-pressure waterstop and a closure plug which is pressure-tight up to 3 bar. The bayonet connections are compatible with all standard systems.

- Flexible connection of cables in new buildings
- Sealed with the MASTERTEC high-pressure collar
- Stable design due to solid wall material
- Compatible with all standard systems

We recommend using gasket inserts for the waterproofing. You can achieve maximum pressure resistance using this system.





Seal fitting on both sides



Seal fitting on one side; closure plug on the other side

Product range

MKD 150 – double version					MKD 150 – single version				
Art. no.	Wall thickness	PU	Weight per pc.	Price per pc.	Art. no.	Wall thickness	PU	Weight per pc.	Price per pc.
162410	180 mm	1 pc.	1.30 kg	€66.95	162460	180 mm	1 pc.	1.10 kg	€48.45
162415	200 mm	1 pc.	1.40 kg	€66.95	162465	200 mm	1 pc.	1.20 kg	€48.45
162420	240 mm	1 pc.	1.50 kg	€66.95	162470	240 mm	1 pc.	1.30 kg	€48.45
162425	250 mm	1 pc.	1.60 kg	€66.95	162475	250 mm	1 pc.	1.30 kg	€48.45
162430	300 mm	1 pc.	1.70 kg	€66.95	162480	300 mm	1 pc.	1.50 kg	€48.45
162435	350 mm	1 pc.	1.90 kg	€66.95	162485	350 mm	1 pc.	1.70 kg	€48.45
162440	365 mm	1 pc.	2.00 kg	€66.95	162490	365 mm	1 pc.	1.70 kg	€48.45
162445	400 mm	1 pc.	2.10 kg	€66.95	162495	400 mm	1 pc.	1.90 kg	€48.45
162400	Key for opening the closure plug								€33.00

Other wall thicknesses are available on request

MASTER-RING gasket inserts are available on request. You will need to let us know the outer diameters of the cables and pipes to be led through.

Sewage pipe bushing systems

Double socket type (DM)



Advantages of the Base and Novo double socket

- Delivered as solid wall version
- With lip seal
- Manufactured for corresponding wall thickness
- Radon-tight
- incl. 2 covers as installation aid
- Pre-installed water barrier

KG DM Base type
KG 2000 DM Base type



■ Pressure water tested up to 7 bar

NEW!

KG DM Novo type
KG 2000 DM Novo type



■ Pressure water tested up to 8 bar

KG DM type product range

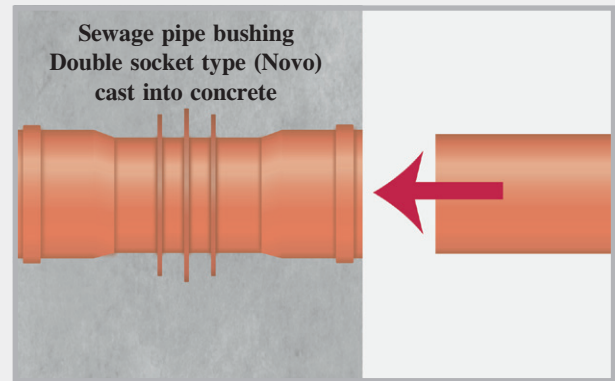
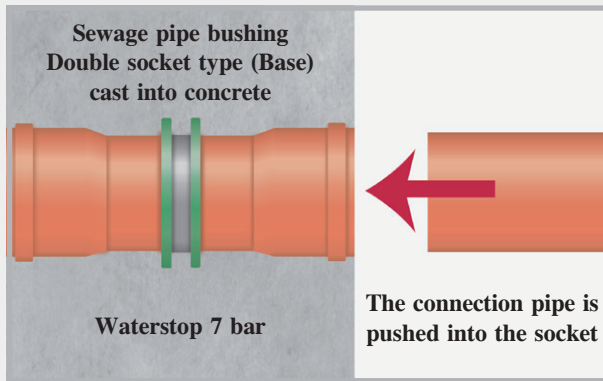
Sewage pipe Ø DN mm	Wall thicknesses						
	180 mm	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
	Base double socket		NEW! Novo double socket				
DN 110	080404	080405	080350	080351	080352	080353	080354
Weight/pc.	0.75 kg	0.80 kg	0.60 kg	0.62 kg	0.70 kg	0.77 kg	0.81 kg
€/pc.	37.30	37.30	34.70	34.70	34.70	34.70	34.70
DN 125	080419	080420	080355	080356	080357	080358	080359
Weight/pc.	1.00 kg	1.00 kg	0.77 kg	0.82 kg	0.91 kg	0.98 kg	1.04 kg
€/pc.	41.65	41.65	38.70	38.70	38.70	38.70	38.70
DN 160	not producible	080433	080434	080436	080438	080440	080442
Weight/pc.		1.75 kg	1.85 kg	1.85 kg	2.05 kg	2.25 kg	2.50 kg
€/pc.		49.75	49.75	49.75	49.75	49.75	49.75
DN 200	not producible	080443	080444	080445	080446	080448	080450
Weight/pc.		2.80 kg	3.00 kg	3.00 kg	3.35 kg	3.60 kg	3.70 kg
€/pc.		69.55	69.55	69.55	69.55	69.55	69.55

KG 2000 DM type product range

KG 2000-Ø DN mm	Wall thicknesses					
	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
	Base double socket	NEW! Novo double socket				
DN 110	080750	080800	080801	080802	080803	080804
Weight/pc.	0.80 kg	0.60 kg	0.62 kg	0.68 kg	0.77 kg	0.81 kg
€/pc.	46.90	43.60	43.60	43.60	43.60	43.60
DN 125	080762	080805	080806	080807	080808	080809
Weight/pc.	1.10 kg	0.77 kg	0.82 kg	0.91 kg	0.98 kg	1.04 kg
€/pc.	56.55	52.60	52.60	52.60	52.60	52.60
DN 160	080774	080776	080778	080780	080782	080784
Weight/pc.	1.60 kg	1.80 kg	2.00 kg	2.30 kg	2.60 kg	2.80 kg
€/pc.	74.70	74.70	74.70	74.70	74.70	74.70
DN 200	080786	080788	080790	080792	080794	080796
Weight/pc.	2.80 kg	3.00 kg	3.20 kg	3.40 kg	3.70 kg	3.85 kg
€/pc.	96.85	96.85	96.85	96.85	96.85	96.85

The Base double socket version is available for further wall thicknesses.

Function of KG type Base and Novo double socket

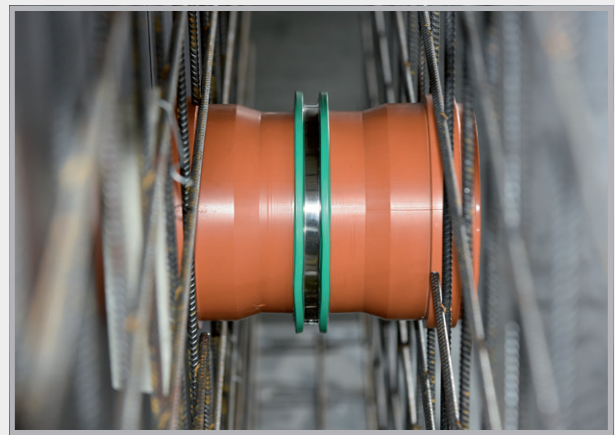


The double socket is cast into concrete. After concreting, the closure plugs are removed and the seals inserted. The next pipe can be connected.

KG type Base double socket on the construction site



Front view, pipe bushing installed



Side view in the formwork

Sewage pipe bushing systems

Flow direction (FR) type

Sewage pipe bushing
KG FR type



KG 2000 pipe bushing
KG 2000 FR type



The flow direction types are manufactured in one piece for the corresponding wall thickness. You can also manufacture any wall thickness yourself on the building site with a ground drain and socket ring. The FR type conveys the wastewater flow in one direction.

KG FR type product range

Sewage pipe Ø DN mm	Wall thicknesses						
	180 mm	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
DN 110	090710	090713	090716	090719	090722	090725	090728
Weight/pc.	0.75 kg	0.80 kg	0.90 kg	0.90 kg	1.00 kg	1.10 kg	1.20 kg
€/pc.	37.30	37.30	37.30	37.30	37.30	37.30	37.30
DN 125	090731	090734	090737	090740	090743	090749	090752
Weight/pc.	1.00 kg	1.00 kg	1.10 kg	1.10 kg	1.25 kg	1.45 kg	1.60 kg
€/pc.	41.65	41.65	41.65	41.65	41.65	41.65	41.65
DN 160	not producible	not producible	090758	090761	090764	090770	090773
Weight/pc.			1.85 kg	1.85 kg	2.05 kg	2.25 kg	2.50 kg
€/pc.			49.75	49.75	49.75	49.75	49.75
DN 200	not producible	not producible	090779	090782	090785	090788	090791
Weight/pc.			3.00 kg	3.00 kg	3.35 kg	3.60 kg	3.70 kg
€/pc.			69.55	69.55	69.55	69.55	69.55

Other wall thicknesses available

KG 2000 FR type product range

KG 2000-Ø DN mm	Wall thicknesses					
	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
DN 110	080820	080825	080830	080835	080845	080850
Weight/pc.	0.80 kg	0.85 kg	0.90 kg	1.10 kg	1.30 kg	1.40 kg
€/pc.	43.20	43.20	43.20	43.20	43.20	43.20
DN 125	080855	080860	080865	080870	080880	080885
Weight/pc.	1.10 kg	1.20 kg	1.20 kg	1.30 kg	1.50 kg	1.65 kg
€/pc.	47.90	47.90	47.90	47.90	47.90	47.90
DN 160	not producible	080890	080895	080905	080915	080920
Weight/pc.		1.80 kg	2.00 kg	2.30 kg	2.60 kg	2.80 kg
€/pc.		57.60	57.60	57.60	57.60	57.60
DN 200	not producible	080923	080925	080933	080935	080945
Weight/pc.		3.10 kg	3.20 kg	3.20 kg	3.70 kg	3.85 kg
€/pc.		82.80	82.80	82.80	82.80	82.80

Other wall thicknesses available

Sewage pipe bushing systems

NEW! Flow direction Universal (FRU) type

The product for stock keeping

KG FRU type product range

Sewage pipe Ø DN mm	Art. no.	Marked cutting lengths / mm (400 mm = standard version)								PU	Weight per pc.	Price per pc.
DN 110	090800	180	200	240	250	300	350	365	400	1 pc.	1.20 kg	€37.30
DN 125	090801	180	200	240	250	300	350	365	400	1 pc.	1.60 kg	€41.65
DN 160	090802	*	*	240	250	300	350	365	400	1 pc.	2.50 kg	€49.75
DN 200	090803	*	*	240	250	300	350	365	400	1 pc.	3.70 kg	€69.55

* = cannot be produced

KG 2000 FRU type product range

KG 2000-Ø DN mm	Art. no.	Marked cutting lengths / mm (400 mm = standard version)								PU	Weight per pc.	Price per pc.
DN 110	080360	180	200	240	250	300	350	365	400	1 pc.	1.40 kg	€43.20
DN 125	080362	180	200	240	250	300	350	365	400	1 pc.	1.65 kg	€47.90
DN 160	080364	*	*	240	250	300	350	365	400	1 pc.	2.80 kg	€57.60
DN 200	080365	*	*	240	250	300	350	365	400	1 pc.	3.85 kg	€82.80

* = cannot be produced



1

The flow direction universal pipe bushing is pre-produced for the wall thickness 400 mm.



2

A length scale is affixed to the pipe bushing so it can be cut to the required wall thickness on site.



3

The adhesive label containing the length scale must be removed after cutting and the cut edge bevelled.

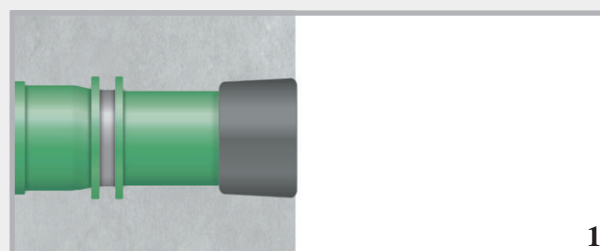


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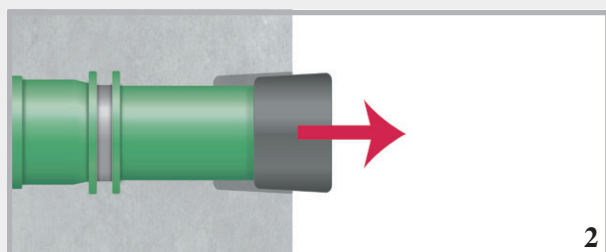
The pipe bushing is ready to install after pushing on the socket ring.

FR + FRU type function

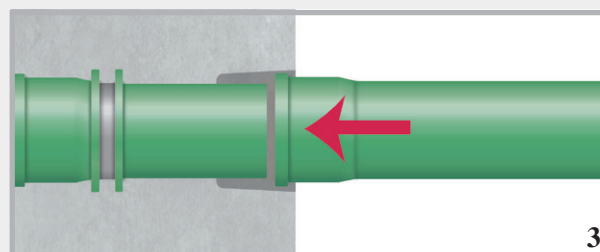
1. KG 2000 flow direction type pipe bushing, concreted into the wall
2. The socket ring is removed before the next pipe is connected.
3. The next pipe is connected. The flow direction of the water is retained.



1



2



3

Sewage pipe bushing systems

NEW! Foil flange (FFL) type

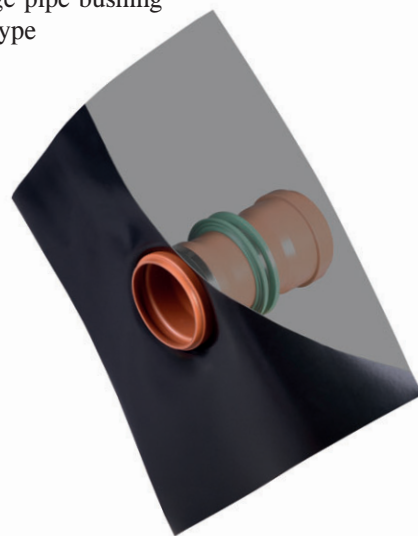
In addition to the pressure water and radon-resistant seal in the concrete provided by the RONDO

Base, the foil flange enables the pipe bushing to be integrated into an outer sealing plane.

Foil flange made of 1.5 mm PVC foil, size: 60 x 60 cm, weldable with hot air gun, bondable with solvent welding agent, resistant to oil and bitumen



Sewage pipe bushing
FFL type



KG FFL type product range

Sewage pipe Ø DN mm	Wall thicknesses						
	180 mm	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
DN 110	080810	080812	080814	080816	080818	080822	080824
Weight/pc.	1.45 kg	1.50 kg	1.60 kg	1.60 kg	1.70 kg	1.80 kg	1.90 kg
€/pc.	76.45	76.45	76.45	76.45	76.45	76.45	76.45
DN 125	080826	080832	080834	080836	080838	080840	080842
Weight/pc.	1.70 kg	1.70 kg	1.80 kg	1.80 kg	1.95 kg	2.15 kg	2.35 kg
€/pc.	83.25	83.25	83.25	83.25	83.25	83.25	83.25
DN 160	not producible	080844	080846	080848	080852	080854	080856
Weight/pc.		2.45 kg	2.55 kg	2.55 kg	2.75 kg	2.95 kg	3.20 kg
€/pc.		95.80	95.80	95.80	95.80	95.80	95.80
DN 200	not producible	080858	080862	080864	080866	080868	080872
Weight/pc.		3.50 kg	3.70 kg	3.70 kg	4.05 kg	4.30 kg	4.40 kg
€/pc.		118.15	118.15	118.15	118.15	118.15	118.15

Other wall thicknesses available

KG 2000 FFL type product range

KG 2000-Ø DN mm	Wall thicknesses					
	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
DN 110	080074	080075	080076	080077	080078	080079
Weight/pc.	1.50 kg	1.55 kg	1.60 kg	1.80 kg	2.00 kg	2.10 kg
€/pc.	86.05	86.05	86.05	86.05	86.05	86.05
DN 125	080080	080081	080082	080083	080084	080085
Weight/pc.	1.80 kg	1.90 kg	1.90 kg	2.00 kg	2.20 kg	2.30 kg
€/pc.	98.15	98.15	98.15	98.15	98.15	98.15
DN 160	080086	080087	080088	080089	080090	080091
Weight/pc.	2.30 kg	2.50 kg	2.70 kg	3.00 kg	3.30 kg	3.50 kg
€/pc.	120.75	120.75	120.75	120.75	120.75	120.75
DN 200	080092	080093	080094	080095	080096	080097
Weight/pc.	3.50 kg	3.70 kg	3.90 kg	4.10 kg	4.40 kg	4.55 kg
€/pc.	145.45	145.45	145.45	145.45	145.45	145.45

Other wall thicknesses available

Sewage pipe bushing systems

NEW! Double socket double wall (DM DW) type



Sewage pipe bushing
DM DW type



KG 2000 pipe bushing
DM DW type



The double-socket double-wall type sewage pipe bushing system is specially designed for use in double-wall elements. The waterstops in the edge zone prevent water permeation of the pipe bushing directly in the outer shells. The centrally mounted waterstop provides an additional seal in the core concrete.

KG DM DW type product range

Sewage pipe Ø DN mm	Wall thicknesses						
	180 mm	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
DN 110	080480	080482	080484	080486	080488	080490	080492
Weight/pc.	1.07 kg	1.12 kg	1.22 kg	1.22 kg	1.32 kg	1.42 kg	1.52 kg
€/pc.	63.30	63.30	63.30	63.30	63.30	63.30	63.30
DN 125	080494	080496	080498	080502	080504	080506	080508
Weight/pc.	1.34 kg	1.34 kg	1.44 kg	1.44 kg	1.59 kg	1.79 kg	1.99 kg
€/pc.	70.70	70.70	70.70	70.70	70.70	70.70	70.70
DN 160	not producible	080512	080514	080516	080518	080522	080524
Weight/pc.		2.19 kg	2.29 kg	2.29 kg	2.49 kg	2.69 kg	2.94 kg
€/pc.		83.80	83.80	83.80	83.80	83.80	83.80
DN 200	not producible	080526	080528	080532	080534	080536	080538
Weight/pc.		3.29 kg	3.49 kg	3.49 kg	3.84 kg	4.09 kg	4.19 kg
€/pc.		116.50	116.50	116.50	116.50	116.50	116.50

Other wall thicknesses available

KG 2000 DM DW type product range

KG 2000-Ø DN mm	Wall thicknesses					
	200 mm	240 mm	250 mm	300 mm	365 mm	400 mm
DN 110	080098	080099	080100	080101	080102	080103
Weight/pc.	1.12 kg	1.17 kg	1.22 kg	1.42 kg	1.62 kg	1.72 kg
€/pc.	72.90	72.90	72.90	72.90	72.90	72.90
DN 125	080104	080105	080106	080107	080108	080109
Weight/pc.	1.42 kg	1.54 kg	1.54 kg	1.64 kg	1.84 kg	1.94 kg
€/pc.	85.60	85.60	85.60	85.60	85.60	85.60
DN 160	080110	080111	080112	080113	080114	080115
Weight/pc.	1.94 kg	2.14 kg	2.44 kg	2.74 kg	3.04 kg	3.24 kg
€/pc.	108.70	108.70	108.70	108.70	108.70	108.70
DN 200	080116	080117	080118	080119	080120	080121
Weight/pc.	3.24 kg	3.44 kg	3.69 kg	3.89 kg	4.19 kg	4.34 kg
€/pc.	143.90	143.90	143.90	143.90	143.90	143.90

Other wall thicknesses available

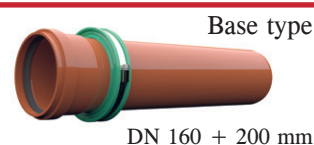
Ground drains



Sewage ground drains – solid wall pipes

Sewage pipe, 0.5 m long, with waterstop and socket on one end

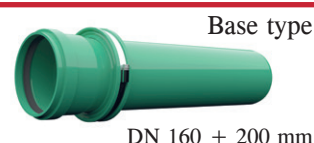
Art. no.	Type	Sewage pipe Ø DN mm	Length	Weight per pc.	Price per pc.
NEW! 080366	DL 110/500	110	500 mm	0.76 kg	€19.50
NEW! 080368	DL 125/500	125	500 mm	0.93 kg	€23.30
080470	DL 160/500	160	500 mm	2.45 kg	€29.25
080475	DL 200/500	200	500 mm	3.85 kg	€37.80



KG 2000 sewage ground drains – solid wall pipes

Sewage pipe, 0.5 m long, with waterstop and socket on one end

Art. no.	Type	Sewage pipe Ø DN mm	Length	Weight per pc.	Price per pc.
NEW! 080827	DL 110/500	110	500 mm	0.76 kg	€28.70
NEW! 080828	DL 125/500	125	500 mm	0.93 kg	€32.50
080986	DL2000 160/500	160	500 mm	2.40 kg	€42.60
080989	DL2000 200/500	200	500 mm	3.80 kg	€53.50



Sewage ground drains with foil flange

Foil flange made of PVC foil 1.5 mm, size: 50 x 50 cm, weldable with hot air gun, bondable with solvent welding agent, resistant to oil and bitumen

KG sewage ground drains with foil flange – solid wall pipes

Sewage pipe, 0.5 m long, with waterstop and socket on one end

Art. no.	Type	Sewage pipe Ø DN mm	Length	Weight per pc.	Price per pc.
080451	DLF 110/500	110	500 mm	1.70 kg	€60.75
080452	DLF 125/500	125	500 mm	2.15 kg	€66.85
080454	DLF 160/500	160	500 mm	3.00 kg	€75.75
080456	DLF 200/500	200	500 mm	4.40 kg	€87.75



KG 2000 sewage ground drains with foil flange

KG 2000 pipe, 0.5 m long, with waterstop and socket on one end

Art. no.	Type	KG 2000-Ø DN mm	Length	Weight per pc.	Price per pc.
080992	DLF2000 110/500	110	500 mm	1.70 kg	€67.15
080994	DLF2000 125/500	125	500 mm	2.00 kg	€76.80
080996	DLF2000 160/500	160	500 mm	2.90 kg	€88.60
080998	DLF2000 200/500	200	500 mm	4.20 kg	€102.45



Sewage pipe bushing systems

Universal type



The universal pipe bushing is supplied with an overall length of 40 cm. The pipe bushing can be shortened on-site to match the desired wall thickness.

Always supplied with plugs at both ends.

KG Universal type product range

incl. plug (installation aid) and seal

Art. no.	Type	Sewage pipe Ø DN mm	Element length	for wall thickness from to	PU	Weight per pc.	Price per pc.
160100	KGU 110	110	40 cm	20-40 cm	1 pc.	1.95 kg	€47.90
160110	KGU 125	125	40 cm	20-40 cm	1 pc.	2.00 kg	€54.60
160120	KGU 160	160	40 cm	24-40 cm	1 pc.	3.10 kg	€62.85
160130	KGU 200	200	40 cm	24-40 cm	1 pc.	4.25 kg	€94.80

KG 2000 Universal type product range

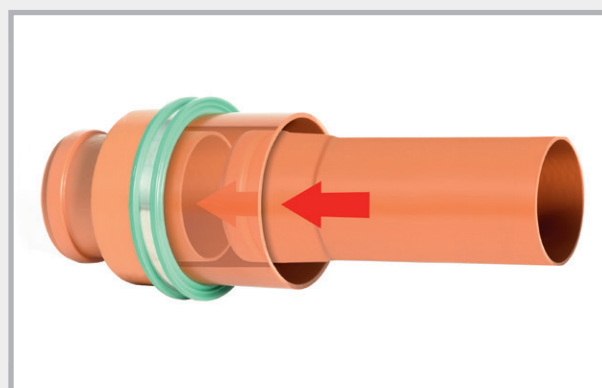
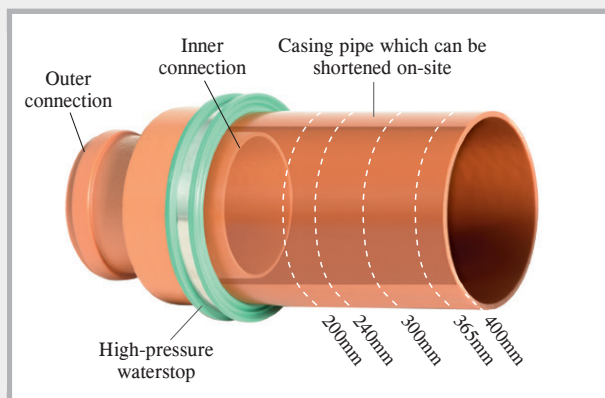
incl. plug (installation aid) and seal

Art. no.	Type	KG 2000-Ø DN mm	Element length	for wall thickness from to	PU	Weight per pc.	Price per pc.
161100	KG2000 U110	110	40 cm	20-40 cm	1 pc.	1.70 kg	€66.95
161110	KG2000 U125	125	40 cm	20-40 cm	1 pc.	1.80 kg	€73.65
161120	KG2000 U160	160	40 cm	24-40 cm	1 pc.	2.80 kg	€95.30

We will shorten the Universal sewage pipe bushing for you to suit the required wall thickness.

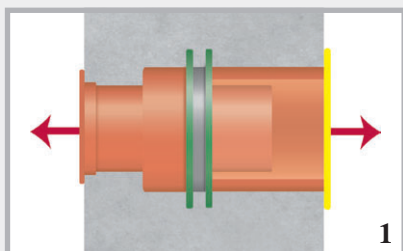
Function

The illustration shows how the connection works. As the socket is pushed onto the spigot end, the flow of water is not interrupted.

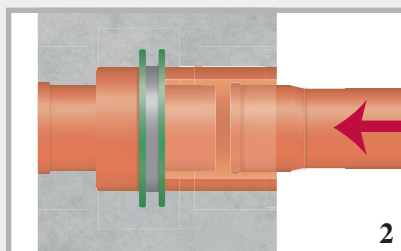


The casing pipe can be shortened on-site to match the desired wall thickness.

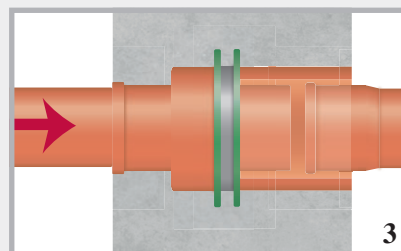
Universal installation type



The universal pipe bushing is manufactured to match the corresponding wall thickness. It is sealed with plugs on the left and right.



The plugs are removed following placement of the concrete.



The connection pipes can be continued to the left and right. The flow direction of the water is retained.

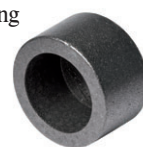
Accessories for lining pipes and pipe bushings

Sewage socket ring for sewage pipe bushings

Flow direction type

Art. no.	Type	PU	Weight per pc.	Price per pc.
080476	MFR 110	1 pc.	0.02 kg	€6.90
080477	MFR 125	1 pc.	0.03 kg	€7.35
080478	MFR 160	1 pc.	0.04 kg	€8.00
080479	MFR 200	1 pc.	0.07 kg	€8.40

Socket ring



Socket ring on RDF



Closure plug + installation aid for lining pipes

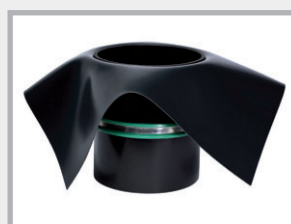
DN	Art. no.	PU	Weight per pc.	Price per pc.
50	090403	1 pc.	0.02 kg	€1.60
80	090401	1 pc.	0.02 kg	€1.80
100	090400	1 pc.	0.02 kg	€1.95
125	090402	1 pc.	0.04 kg	€2.45
150	090404	1 pc.	0.04 kg	€3.40
200	090406	1 pc.	0.10 kg	€4.50
250	090408	1 pc.	0.16 kg	€7.00
300	090410	1 pc.	0.24 kg	€8.85
350	090412	1 pc.	0.39 kg	€15.30
400	090414	1 pc.	0.45 kg	€19.80

Reusable



Foil flange for lining pipes incl. mounting strap

DN	Art. no.	Flange dimensions	PU	Weight per pc.	Price per pc. excl. lining pipe
50	090388	40 x 40 cm	1 pc.	0.19 kg	€33.10
80	090389	40 x 40 cm	1 pc.	0.20 kg	€33.10
100	090390	50 x 50 cm	1 pc.	0.43 kg	€39.15
125	090391	50 x 50 cm	1 pc.	0.45 kg	€41.60
150	090392	50 x 50 cm	1 pc.	0.47 kg	€46.05
200	090393	60 x 60 cm	1 pc.	0.70 kg	€48.60
250	090394	60 x 60 cm	1 pc.	0.70 kg	€51.60
300	090395	70 x 70 cm	1 pc.	1.00 kg	€55.20



Foil flange made of 1.5 mm PVC foil, resistant to oil and bitumen, weldable with hot air gun, bondable with solvent welding agent

MASTER-RING

Stainless steel V2A gasket inserts

Gasket inserts for lining pipes and core drill holes

- One seal against pressurised and non-pressurised water
- Pressure-tight up to 30 m water column, in fixed and secure position up to 50 m
- Rubber thickness 40 mm
- Temperature range -30°C to +120°C
- Steel parts and screws made of V2A stainless steel
- Satisfy the requirements of the FHRK testing principles GE 101



Installation: Once the gasket insert has been inserted and the medium pipe has been led through, the screws are tightened crosswise. Give each screw one turn and repeat this procedure several times so the rubber is pressed out uniformly. Maximum torque M6 = 5 Nm, M8 = 10 Nm, M10 = 15 Nm, M12 = 20 Nm. Retighten the nuts after 2-3 hours.

Core drill hole mm Lining pipe FASO/ WELLO/DURO Plus	Art. no.	Medium pipe in mm		PU	Weight per pc.	Price per pc.
		from	to			
50	120080	6	12	1	0.38 kg	€43.90
80	120100	20	28	1	0.41 kg	€48.35
80	120105	32	40	1	0.42 kg	€48.35
NEW! 80	120095	48	50	1	0.41 kg	€48.35
NEW! 100	120107	15	22	1	0.59 kg	€52.45
100	120110	20	28	1	0.59 kg	€52.45
100	120112	25	32	1	0.59 kg	€52.45
100	120115	32	40	1	0.64 kg	€52.45
100	120120	36	44	1	0.64 kg	€52.45
100	120125	46	56	1	0.54 kg	€52.45
100	120130	55	65	1	0.52 kg	€52.45
125	120140	45	54	1	1.05 kg	€66.85
125	120145	55	64	1	0.84 kg	€66.85
125	120150	70	78	1	0.75 kg	€66.85
150	120152	46	54	1	1.37 kg	€82.40
150	120153	56	66	1	1.32 kg	€82.40
150	120155	69	78	1	1.22 kg	€82.40
150	120160	79	91	1	1.18 kg	€82.40
150	120165	85	94	1	1.07 kg	€82.40
150	120170	98	110	1	0.96 kg	€82.40
200	120172	88	103	1	2.00 kg	€104.85
200	120175	108	115	1	1.96 kg	€104.85
200	120180	116	126	1	1.88 kg	€104.85
200	120185	132	141	1	1.63 kg	€104.85
200	120190	135	144	1	1.46 kg	€104.85
200	120192	150	160	1	1.40 kg	€104.85
250	120195	135	144	1	2.90 kg	€158.70
250	120197	140	149	1	2.90 kg	€158.70
250	120200	150	159	1	2.60 kg	€158.70
250	120205	157	162	1	2.60 kg	€158.70
250	120210	174	181	1	2.55 kg	€158.70
250	120215	178	187	1	2.15 kg	€158.70
250	120216	197	202	1	2.10 kg	€158.70
250	120218	204	210	1	2.05 kg	€158.70
300	120225	193	204	1	3.50 kg	€193.65
300	120230	218	226	1	3.15 kg	€193.65
350	120235	224	233	1	5.25 kg	€301.80
350	120240	249	258	1	4.85 kg	€301.80
350	120242	270	282	1	4.55 kg	€301.80
400	120245	270	280	1	5.70 kg	€395.55
400	120250	279	288	1	5.65 kg	€395.55
400	120255	304	313	1	5.10 kg	€395.55
400	120260	314	323	1	4.60 kg	€395.55
400	120265	320	330	1	4.20 kg	€395.55

Note:

Additional supply options:

Split version available for additional charge.

Steel parts + screws in V4A stainless steel; rubber made of NBR or compliant with potable water quality standards

MASTER-RING Multi

Gasket inserts with “onion ring” technology

A large number of installation options with only 4 sizes

YouTube



Product description of MASTER-RING Multi



Pressure-resistant: 30 metre water column = 3 bar

Pressure plate material: V2A

Screws and nuts: V2A

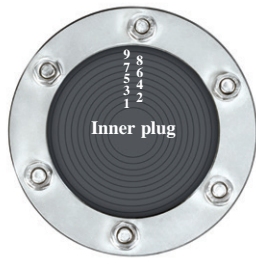
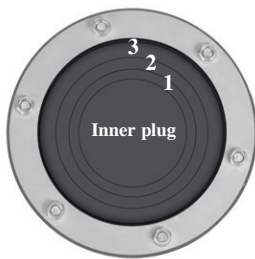
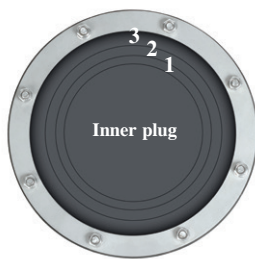

Design: Closed ring

Rubber material: EPDM

Width of rubber: 40 mm

Temperature range: -30°C to +120°C

Resistances: Excellent resistance to ageing, weathering and ozone

				
	MASTER-RING Multi 100 Art. no. 120135 Medium pipe in mm from to	MASTER-RING Multi 150 Art. no. 120171 Medium pipe	MASTER-RING Multi 200 Art. no. 120193 Medium pipe	MASTER-RING Multiple Multi 100 Art. no. 120270 Split version
After removing the inner plug	18-20 mm	63 mm	110 mm	4 mm
1st ring	21-25 mm	76 mm	125 mm	11 mm
2nd ring	26-30 mm	90 mm	140 mm	15 mm
3rd ring	31-35 mm	110 mm	160 mm	20 mm
4th ring	36-40 mm			25 mm
5th ring	41-45 mm			32 mm (without break-off rings)
6th ring	46-50 mm			
7th ring	51-55 mm			
8th ring	56-60 mm			
9th ring	61-65 mm			
Weight/pc.	0.64 kg	1.35 kg	2.20 kg	0.90 kg
Price/pc.	€57.60	€90.45	€119.40	€180.00

Protection of the core drill hole with epoxy resin

- PROTECT EP resin ensures lasting preservation of the core drill hole
- Application on dry substrate



Installation of MASTER-RING Multi

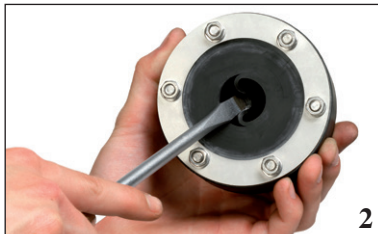
Once you have determined the outer diameter of the pipe to be waterproofed, prepare the MASTER-RING Multi for installation.

Example for DN 100 core drill hole and medium pipe outer diameter 18 mm



Only remove the inner plug

Example for DN 100 core drill hole and medium pipe outer diameter 23 mm



After removing the inner plug, release the first ring ...

Example: Multi 100



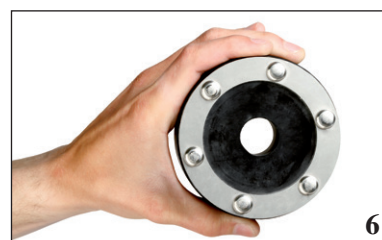
... and push it through the gasket insert.



Pushed-through 1st ring



Simply cut off the pushed-through ring using a cutter



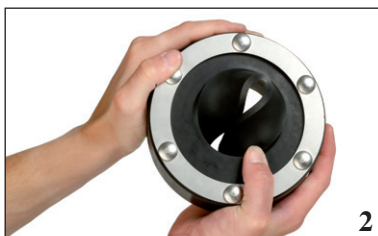
Multi 100 ready for installation

Example for DN 200 core drill hole and medium pipe outer diameter 110 mm



Only remove the inner plug

Example for DN 200 core drill hole and medium pipe outer diameter 125 mm



Release the first ring and push it through the gasket

Example: Multi 200



Cut off the pushed-through ring using a cutter – the gasket is now ready for installation.

Example for DN 100 core drill hole and medium pipe outer diameter 15 mm



Open the split gasket insert and take out the required segmented stopper.

Example Multiple Multi



Pull out the ring segment you want to remove and sever it with a cutter.

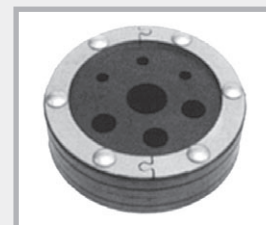


After cutting the stopper to the required size, reinsert it and the gasket insert can be installed.

MASTER-RING Multiple

V2A stainless steel multiple wall duct gasket inserts for cables and pipes

- Pressure-tight up to 10 m water column
- Rubber thickness 40 mm
- Steel parts and screws made of V2A stainless steel



Split version



Mounted

Core drill hole Lining pipe FASO/ WELLO/DURO Plus	Art. no.	Outer diameter Medium pipe in mm	Weight per pc.	Price per pc. incl. 2 boreholes
50	120515	4 to 20	0.39 kg	€84.05
80	120410	4 to 33 or 40 or 42	0.43 kg	€98.60
100	120415	4 to 33 or 40 or 42 or 50	0.62 kg	€107.25
125	120420	4 to 33 or 40 or 42 or 50	0.93 kg	€143.20
150	120425	4 to 33 or 40 or 42 or 50	1.31 kg	€179.20
	120495	Additional borehole		€12.40

As a basic rule, the technical feasibility of the combination of number and diameter of the media in relation to the minimum diameter of the core drill hole or lining pipe must be checked. Please contact our sales office for assistance.

Stainless steel V2A blind plugs

for core drill hole and lining pipe

- Pressure-tight: 80-200 mm = 30 m water column
250-300 mm = 10 m water column
- Rubber thickness 40 mm
- Steel parts and screws made of V2A stainless steel



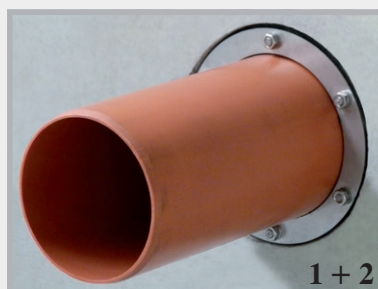
DN	Art. no.	PU	Weight/kg	Price/pc.
80	120520	1 pc.	0.49 kg	€56.90
100	120525	1 pc.	0.75 kg	€62.85
125	120530	1 pc.	1.25 kg	€73.45
150	120535	1 pc.	2.10 kg	€87.05
200	120540	1 pc.	3.40 kg	€115.40
250	120545	1 pc.	6.10 kg	€387.30
300	120550	1 pc.	8.80 kg	€541.80

Blind plugs up to DN 1500 mm available on request

Tightening the MASTER-RING Multi

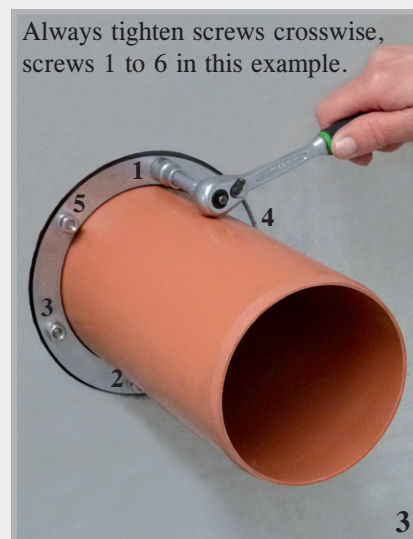
All 3 types of screw should be tightened to a torque of 5 Nm.

1. Insert the gasket insert into the lining pipe or the core drill hole.
2. Push the medium pipe through



3. Tighten the screws crosswise through one turn. Repeat this process until all screws are tightened to 5 Nm. Retighten the screws after 24 hours.

Always tighten screws crosswise, screws 1 to 6 in this example.



FLEX 2000



Plastic, vapour and waterproof sealing compound for waterproofing of pipe and cable ducts below ground level. Also suitable for leakage sealing in case of inflowing water.

**Annular gap sealing (tested by MFPA Leipzig)
up to 7.5 m water column**



Art. no.	Description	PU	Secondary packaging	Weight	Price
120610	Flex 2000 sealing compound cartridge 850 g	1 cartridge	Carton of 20 cartridges	0.94 kg	€45.40
120620	Cartridge applicator with flexible attachment	1 pc.		1.07 kg	€124.00
120630	Flexible nozzle	1 pc.		0.06 kg	€52.45

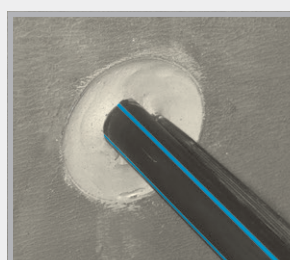
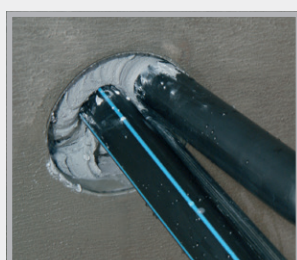
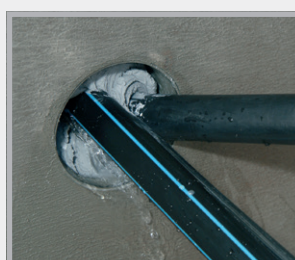


Technical data

Consistency	Paste-like, non-sagging
Heat resistance	+50°C
Processing temperature	+5°C to +35°C
Usage	approx. 1.6 kg per litre void
Storage	2 years at 20°C

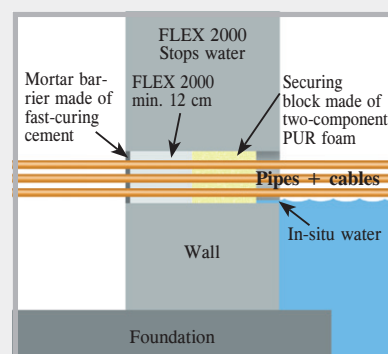
Substrate

The substrate may be dry, damp or wet. The substrate must be free from grease, tar, oil and loose particles. Suitable substrates are: concrete, brick, mortar, plaster and all other mineral construction materials as well as ceramics, PVC, polyethylene and polypropylene.



Application

Prior to application, Flex 2000 is heated to approx. 30-40°C by placing it in warm water for at least 30 minutes to ensure optimum consistency and workability. Clean the inside of the duct using a suitable brush to remove dust, sand, and any loose particles. Before applying Flex 2000, a securing block of a two-component PUR foam is applied at a depth of approx. 10 cm. The Flex 2000 cartridge is then placed in the cartridge applicator and the material is pressed through the flexible nozzle into the duct from back to front so that the resulting layer is at least 12 cm thick. After sealing cable ducts, jiggle the cable slightly and press Flex 2000 into any voids that form. Always ensure that the cable is free of tension and strain after sealing. Finally, the sealing compound set back approx. 1 cm is pressed in well and smoothed with a metal filler knife. As an additional safeguard, the opening of the duct is closed with fast-curing cement. If a new cable is to be installed later on, the mortar barrier is removed and the cable is pushed through the sealing compound. The duct is subsequently sealed using Flex 2000.



MASTER-SEAL

Modular seal



- Preassembled
- Fast and easy installation
- Tested up to 30 m water column
- Can be retrofitted (all gasket inserts are also separable)

Area of installation Core drill hole mm Lining pipe FASO/ WELLO/DURO Plus	Medium pipe outer Ø mm		Type	Weight	Stainless steel		Galvanised	
	from	to			Art. no.	Price/pc.	Art. no.	Price/pc.
50	11	19	4 x 275	0.08 kg	110250	€22.30	110600	€15.20
50	20	25	4 x 200	0.08 kg	110255	€11.90	110605	€11.05
80	20	33	4 x 350	0.32 kg	110260	€37.05	110610	€27.30
80	34	44	5 x 300	0.30 kg	110265	€31.50	110615	€26.80
80	45	49	6 x 250	0.14 kg	110267	€31.25	110617	€24.05
80	50	55	7 x 200	0.14 kg	110268	€20.80	110618	€19.30
100	27	38	4 x 375	0.52 kg	110270	€48.50	110620	€32.90
100	39	50	6 x 350	0.48 kg	110275	€55.55	110625	€40.90
100	56	64	6 x 300	0.36 kg	110280	€37.80	110630	€32.15
100	65	69	8 x 250	0.16 kg	110281	€41.65	110631	€32.05
100	70	75	9 x 200	0.18 kg	110282	€26.70	110632	€24.85
125	41	44	4 x 475	1.04 kg	110283	€84.05	110633	€55.15
125	45	52	4 x 415	0.96 kg	110284	€57.65	110634	€41.65
125	53	63	5 x 375	0.65 kg	110285	€60.60	110635	€41.10
125	64	78	7 x 350	0.56 kg	110290	€64.80	110640	€47.70
125	79	90	8 x 300	0.48 kg	110295	€50.35	110645	€42.90
125	90	94	11 x 250	0.22 kg	110296	€57.25	110646	€44.10
125	96	100	11 x 200	0.22 kg	110297	€32.65	110647	€30.35
150	58	69	5 x 475	1.30 kg	110298	€105.10	110648	€68.95
150	63	76	5 x 415	1.20 kg	110300	€72.05	110650	€52.05
150	75	82	6 x 375	0.75 kg	110305	€72.75	110655	€49.35
150	88	103	9 x 350	0.68 kg	110310	€83.35	110660	€61.35
150	106	115	10 x 300	0.60 kg	110315	€62.95	110665	€53.60
150	113	118	14 x 250	0.28 kg	110316	€72.85	110666	€56.10
150	120	124	14 x 200	0.28 kg	110317	€41.55	110667	€38.60
200	88	107	6 x 575	2.50 kg	110320	€188.20	110670	€122.05
200	108	118	7 x 475	1.82 kg	110325	€147.10	110675	€96.50
200	115	122	7 x 415	1.68 kg	110330	€100.90	110680	€72.85
200	125	138	9 x 375	1.17 kg	110335	€109.10	110685	€74.00
200	140	153	13 x 350	0.98 kg	110340	€120.40	110690	€88.60
200	156	165	14 x 300	0.84 kg	110345	€88.10	110695	€75.00
200	164	168	19 x 250	0.38 kg	110346	€98.85	110696	€76.10
200	171	174	19 x 200	0.38 kg	110347	€56.35	110697	€52.40



Place MASTER-SEAL around the medium pipe and seal



Push MASTER-SEAL into the annular gap



Tighten each screw one by one in a circular direction by turning once until all modules are evenly tightened.



MASTER-SEAL installation complete

MASTER-SEAL

Modular seal

YouTube



Area of installation Core drill hole mm Lining pipe FASO/ WELLO/DURO Plus	Medium pipe outer Ø mm		Type	Weight	Stainless steel		Galvanised	
	from	to			Art. no.	Price/pc.	Art. no.	Price/pc.
250	114	130	6 x 500	3.72 kg	110350	€233.75	110700	€159.20
250	137	158	8 x 575	3.32 kg	110355	€250.95	110705	€162.70
250	159	166	9 x 475	2.34 kg	110360	€189.15	110710	€124.10
250	166	178	7 x 400	2.17 kg	110365	€123.45	110715	€101.95
250	178	185	12 x 375	1.50 kg	110370	€145.45	110720	€98.65
250	182	189	7 x 425	1.75 kg	110371	€148.20	110721	€98.70
250	192	200	17 x 350	1.28 kg	110372	€157.40	110722	€115.85
250	194	202	9 x 325	1.22 kg	110373	€114.25	110723	€75.85
250	208	213	18 x 300	1.08 kg	110374	€113.30	110724	€96.45
300	188	204	10 x 575	4.18 kg	110375	€313.70	110725	€203.40
300	206	217	12 x 475	3.12 kg	110380	€252.20	110730	€165.45
300	215	226	12 x 415	2.88 kg	110385	€172.90	110735	€124.85
300	228	236	15 x 375	1.88 kg	110386	€181.80	110736	€123.30
300	232	242	9 x 425	2.25 kg	110387	€190.55	110737	€126.90
300	244	253	11 x 325	1.49 kg	110388	€139.65	110738	€92.70
300	258	263	22 x 300	1.32 kg	110389	€138.50	110739	€117.90
350	219	231	9 x 500	5.58 kg	110390	€350.65	110740	€238.75
350	239	253	12 x 575	4.98 kg	110395	€376.40	110745	€244.10
350	265	275	14 x 415	3.36 kg	110400	€201.75	110750	€145.65
350	276	286	18 x 375	2.25 kg	110405	€218.15	110755	€147.95
350	314	317	35 x 250	0.70 kg	110408	€182.05	110758	€140.20
400	239	256	10 x 650	9.50 kg	110410	€531.60	110760	€389.60
400	265	274	11 x 500	6.82 kg	110415	€428.55	110765	€291.80
400	314	328	12 x 400	3.66 kg	110420	€211.60	110770	€174.80
400	343	350	15 x 325	2.03 kg	110425	€190.40	110775	€123.30
450	358	370	19 x 475	4.94 kg	110430	€399.30	110780	€261.90
450	366	379	14 x 400	4.27 kg	110435	€246.90	110785	€203.90
450	393	405	17 x 325	2.30 kg	110440	€215.80	110790	€143.25
500	311	326	8 x 600	14.56 kg	110443	€523.50	110793	€355.80
500	340	358	13 x 650	12.38 kg	110445	€691.10	110795	€506.50
500	390	407	18 x 575	7.47 kg	110450	€564.60	110800	€366.10
500	409	419	21 x 475	5.46 kg	110455	€441.30	110805	€289.50
550	390	408	14 x 650	13.30 kg	110460	€744.25	110810	€545.45
550	415	435	15 x 500	9.30 kg	110465	€584.40	110815	€397.95
550	440	457	20 x 575	8.30 kg	110470	€627.30	110820	€406.80
550	457	470	23 x 475	5.98 kg	110475	€483.35	110825	€317.05
600	410	440	10 x 600	18.20 kg	110480	€654.35	110830	€444.75
600	440	458	16 x 650	15.20 kg	110485	€850.55	110835	€623.35
600	490	505	22 x 575	9.13 kg	110490	€690.05	110840	€447.45
600	515	528	19 x 400	5.80 kg	110495	€335.05	110845	€276.75

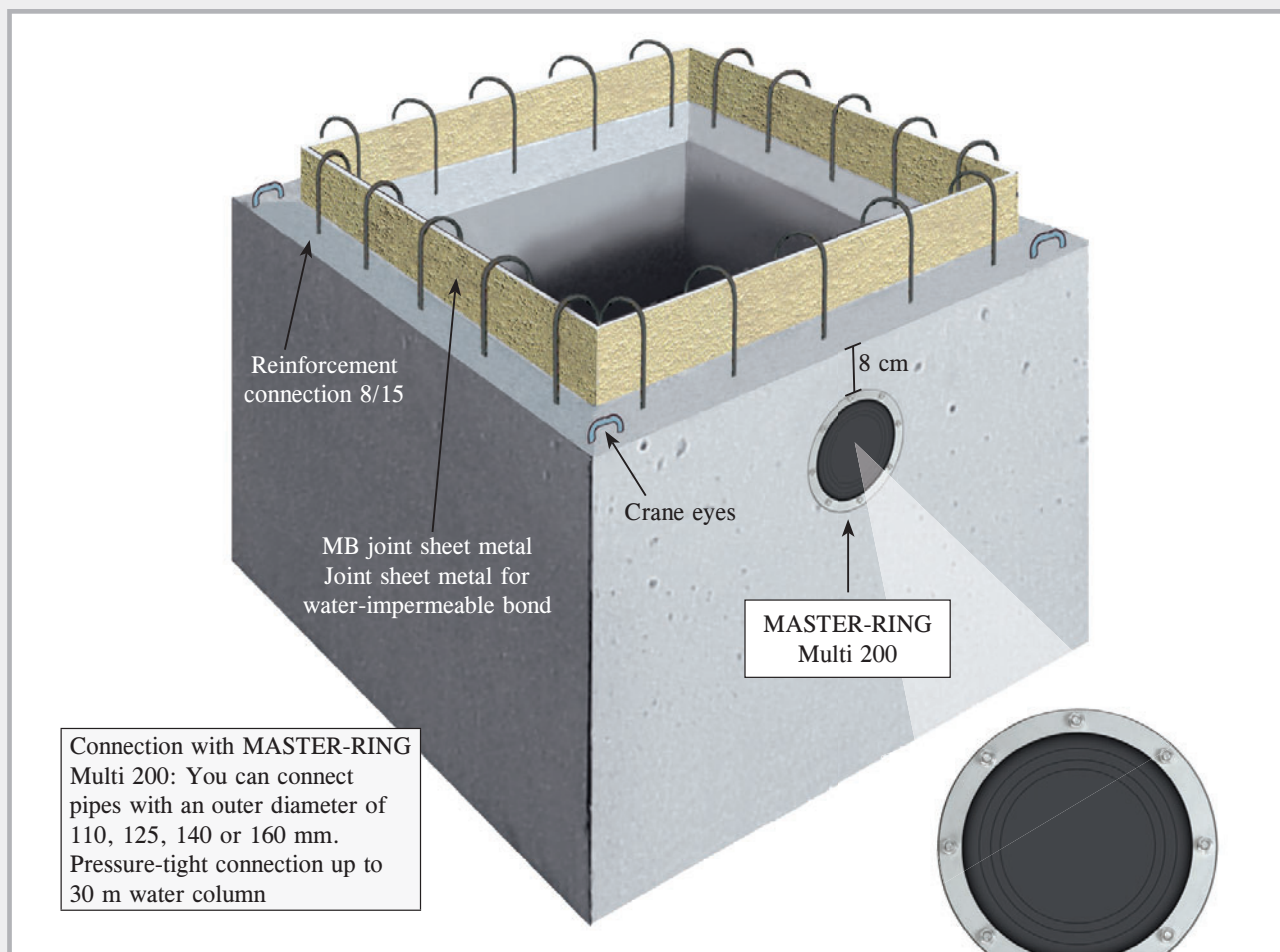
Additional sizes available immediately ex stock

Installation: After insertion of the modular seal and lead-through of the medium pipe, the screws are tightened one by one in a clockwise direction. Give each screw one turn and repeat this procedure several times so the rubber is pressed out uniformly.

Maximum torques	TYPE	200/250/275	3 Nm	500/525	60 Nm	650	85 Nm
		300/325/350/375	15 Nm	575	50 Nm	600	130 Nm
		400/415/425/475	35 Nm				

PILO

Pump sump Multi “Standard”



Pressure-tight and flexible with the MASTER RING Multi 200

The PILO pump sump is a precast concrete part made of water-impermeable concrete C 35/45.

- reduces the construction time
- eliminates difficult shuttering
- easy installation
- manufactured from water-impermeable concrete
- watertight connection thanks to use of MPA-tested joint sheet metal
- Connection reinforcement
- Crane eyes

Sizes of PILO pump sump Multi “Standard”

Art. no.	Inner dimensions W x L x H	Wall thickness	Weight	Outer dimensions W x L x H	PU	Price
090450	60 x 60 x 60 cm	12 cm	approx. 730 kg	84 x 84 x 72 cm	1 pc.	€545.45/pc.
090452	80 x 80 x 80 cm	12 cm	approx. 1320 kg	104 x 104 x 92 cm	1 pc.	€746.95/pc.
090454	100 x 100 x 80 cm	12 cm	approx. 1640 kg	124 x 124 x 92 cm	1 pc.	€873.40/pc.
NEW! 090455	100 x 100 x 100 cm	12 cm	approx. 1890 kg	124 x 124 x 112 cm	1 pc.	€996.00/pc.
090456	120 x 120 x 80 cm	12 cm	approx. 2050 kg	144 x 144 x 92 cm	1 pc.	€1098.40/pc.

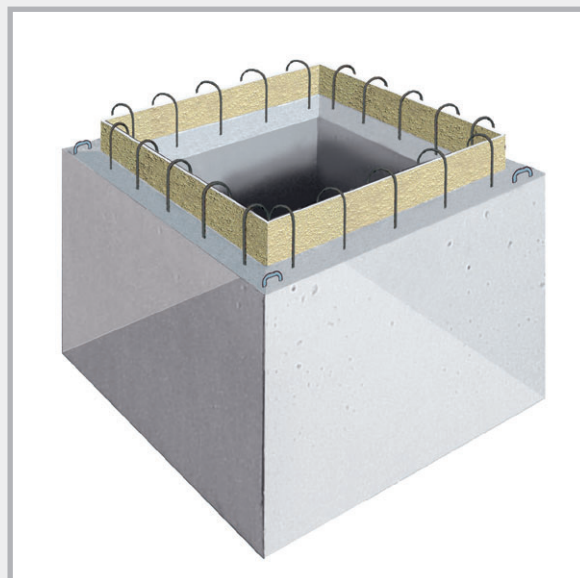
Due to the production process, the pump sumps are slightly tapered. The internal width-wise and length-wise dimensions reduce towards the base of the duct.

PILO

Pump sump “Spezial”

- ➔ Water-impermeable concrete C35/45
- ➔ with joint sheet metal MB
- ➔ Connection reinforcement

The PILO pump sump “Spezial” has no borehole. These are made at the last minute according to your specifications.

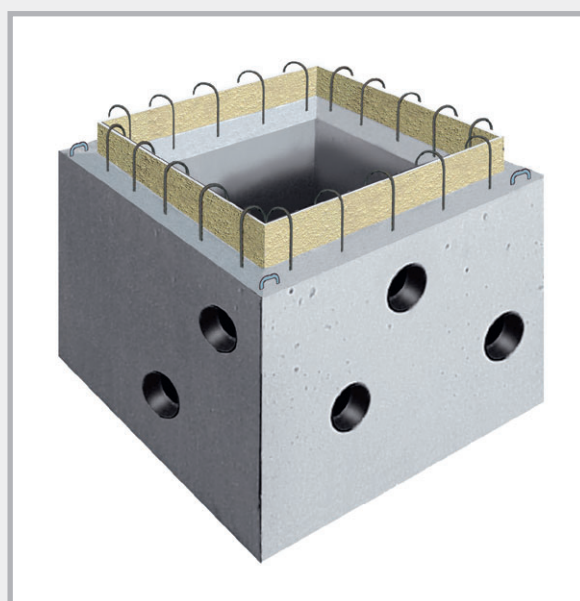


Sizes of PILO pump sump without borehole

Art. no.	Inner dimensions W x L x H	Wall thickness	Weight	Outer dimensions W x L x H	PU	Price
090443	60 x 60 x 60 cm	12 cm	approx. 730 kg	84 x 84 x 72 cm	1 pc.	€540.00/pc.
090445	80 x 80 x 80 cm	12 cm	approx. 1320 kg	104 x 104 x 92 cm	1 pc.	€736.20/pc.
090447	100 x 100 x 80 cm	12 cm	approx. 1640 kg	124 x 124 x 92 cm	1 pc.	€862.65/pc.
NEW! 090448	100 x 100 x 100 cm	12 cm	approx. 1890 kg	124 x 124 x 112 cm	1 pc.	€986.50/pc.
090449	120 x 120 x 80 cm	12 cm	approx. 2050 kg	144 x 144 x 92 cm	1 pc.	€1087.70/pc.

Boreholes

Art. no.		Price
090440	Core drill hole DN 200, flexible connection 110, 125, 140 and 160 mm, incl. MASTER-RING Multi DN 200	€139.60 per pc.
090430	Connection for sewage pipe DN 110 incl. connection seal	€74.70 per pc.
090432	Additional connection for sewage pipe DN 125 incl. connection seal	€80.10 per pc.
090433	Additional connection for sewage pipe DN 160 incl. connection seal	€85.50 per pc.
090436	Additional connection for sewage pipe DN 200 incl. connection seal	€98.50 per pc.



The connection bores are made according to your specifications.
The options are listed in the table.

Shaft cover for pump sump

Walkable covers, galvanised

Pump sump L x W x H Dimensions	60 x 60 x 60 cm	80 x 80 x 80 cm	100 x 100 x 80 cm	120 x 120 x 80 cm
clear dimension	65.5 x 65.5 cm	85.5 x 85.5 cm	105.5 x 105.5 cm	122 x 122 cm
cover size	70 x 70 cm	90 x 90 cm	110 x 110 cm	126.5 x 126.5 cm
frame outer dimension	71 x 71 cm	91 x 91 cm	111 x 111 cm	131 x 131 cm
can withstand loads up to 750 kg				
Art. no.	090532	090534	090536	090538
Weight/pc.	15.0 kg	24.0 kg	44.0 kg	66.0 kg
Price/pc.	€136.60	€207.60	€384.60	€661.05
can be bolted down tightly to exclude surface water and odours, can withstand loads up to 750 kg				
Art. no.	090542	090544	090546	090548
Weight/pc.	26.0 kg	39.0 kg	55.0 kg	74.0 kg
Price/pc.	€324.00	€465.50	€654.50	€1043.50

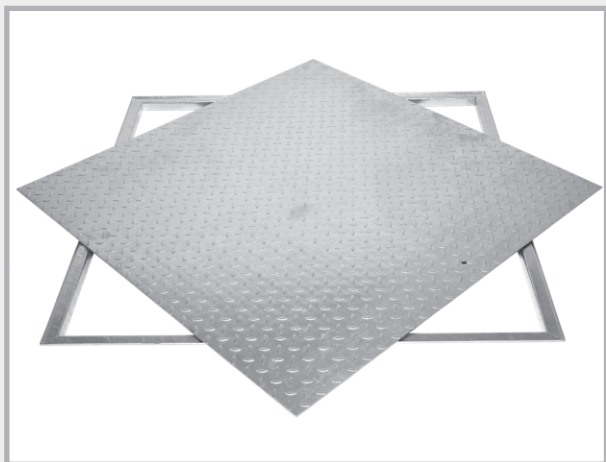
Traffic-bearing covers, galvanised

Pump sump L x W x H Dimensions	60 x 60 x 60 cm	80 x 80 x 80 cm	100 x 100 x 80 cm	120 x 120 x 80 cm
clear dimension	63 x 63 cm	83 x 83 cm	103 x 103 cm	120 x 120 cm
cover size	70 x 70 cm	90 x 90 cm	110 x 110 cm	126.5 x 126.5 cm
frame outer dimension	74 x 74 cm	94 x 94 cm	114 x 114 cm	131 x 131 cm
traffic-bearing up to 5000 kg wheel pressure up to 1250 kg				
Art. no.	090552	090554	090556	090558
Weight/pc.	32.0 kg	51.0 kg	70.0 kg	112.0 kg
Price/pc.	€311.40	€500.45	€780.15	€1256.55
traffic-bearing up to 15000 kg wheel pressure up to 3750 kg				
Art. no.	090562	090564	090566	090568
Weight/pc.	43.0 kg	70.0 kg	97.0 kg	137.0 kg
Price/pc.	€529.95	€795.45	€1240.15	€2032.30

Shaft cover for pump sump

walkable

Frame and cover galvanised, with 1 borehole as lifting opening



walkable

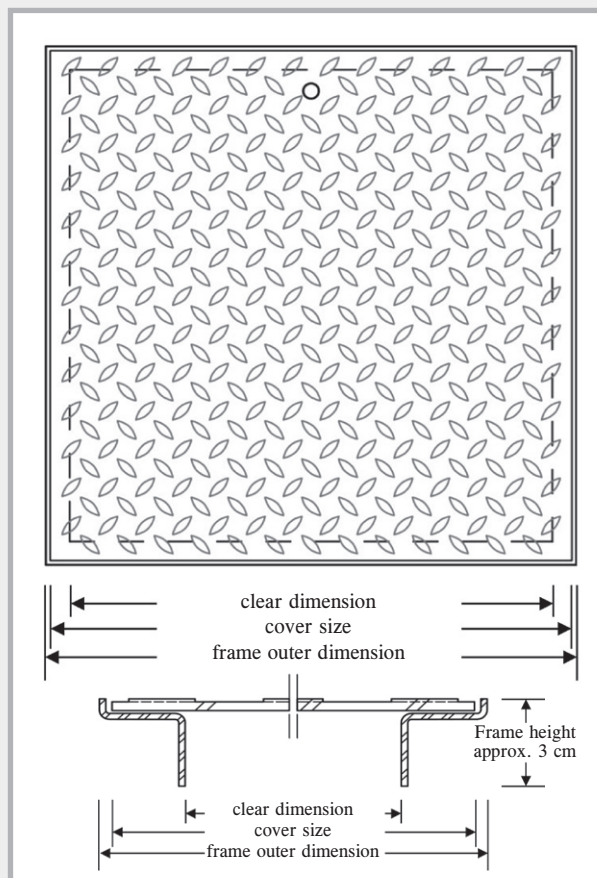
Can be bolted down tightly to exclude surface water and odours, galvanised frame and cover, EPDM cellular-rubber seal in frame, cover can be screwed



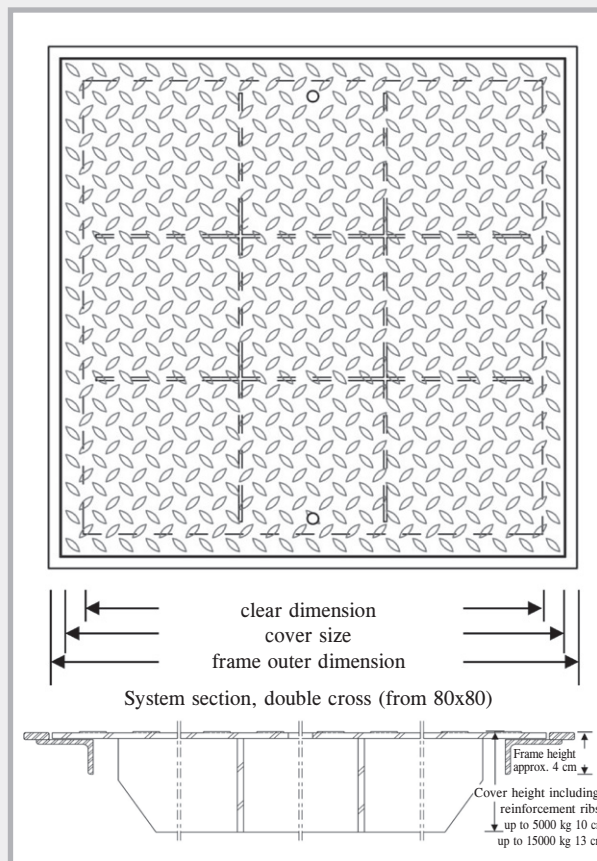
traffic-bearing, galvanised



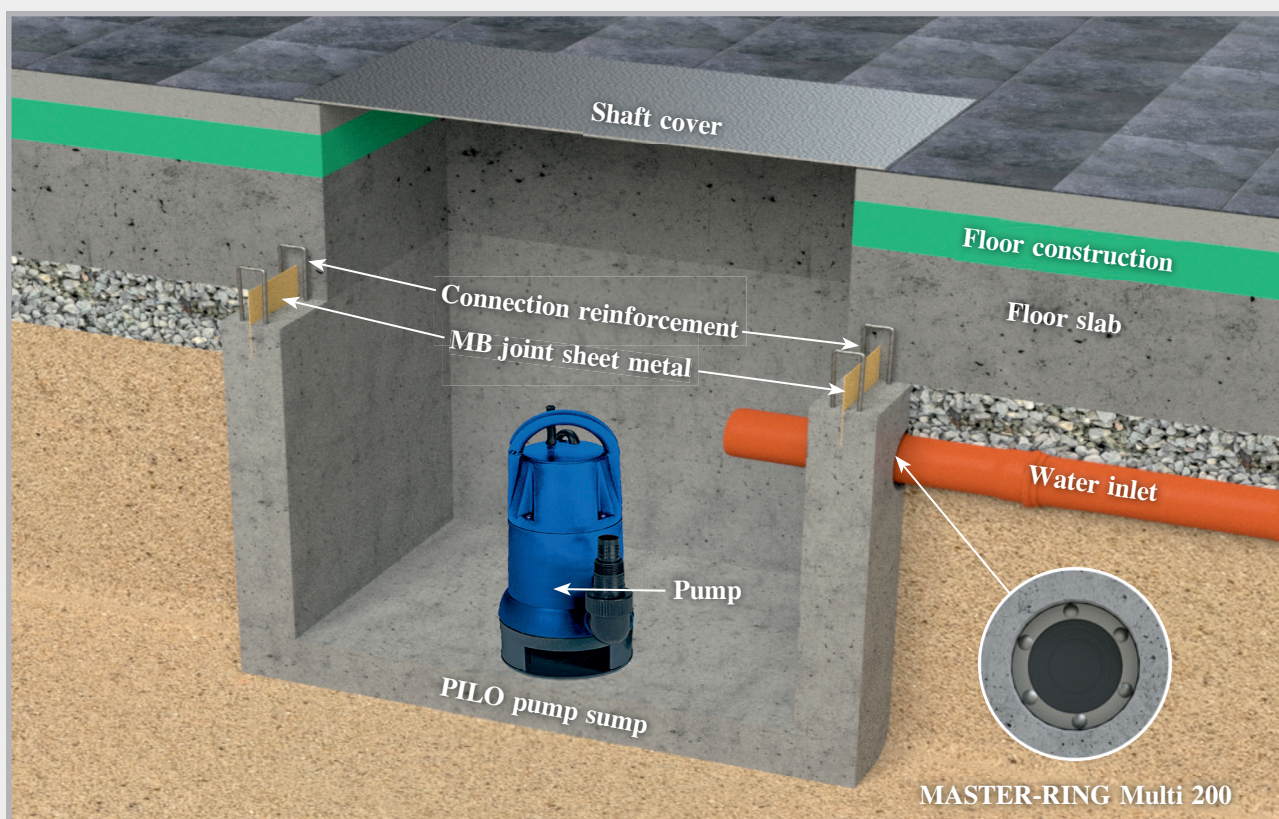
Dimensions, walkable



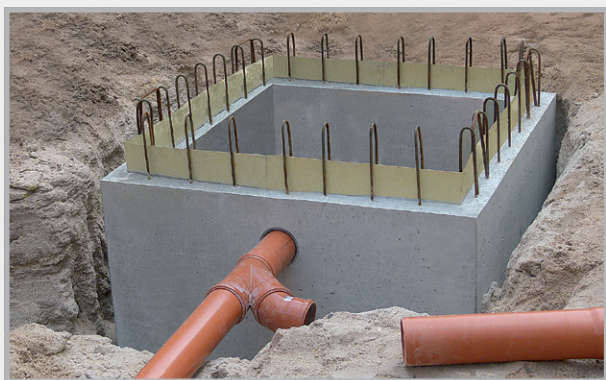
Dimensions, traffic-bearing



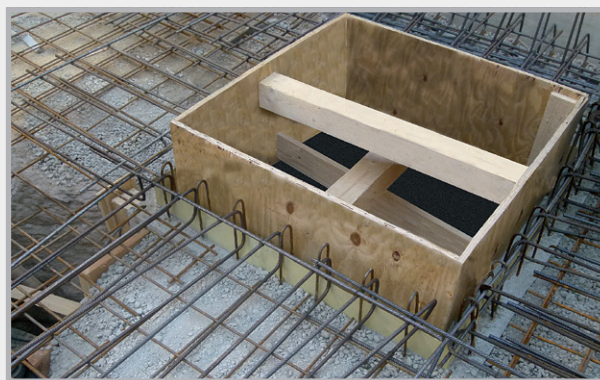
Principle of operation of the PILO pump sump



At the construction site



PILO pump sump with connected inlet.



PILO pump sump prior to concreting of foundation. The illustration shows the joint sheet metal which forms a pressure water-tight seal at the transition to the foundation. The connection reinforcement of the pump sump is connected to the foundation reinforcement.



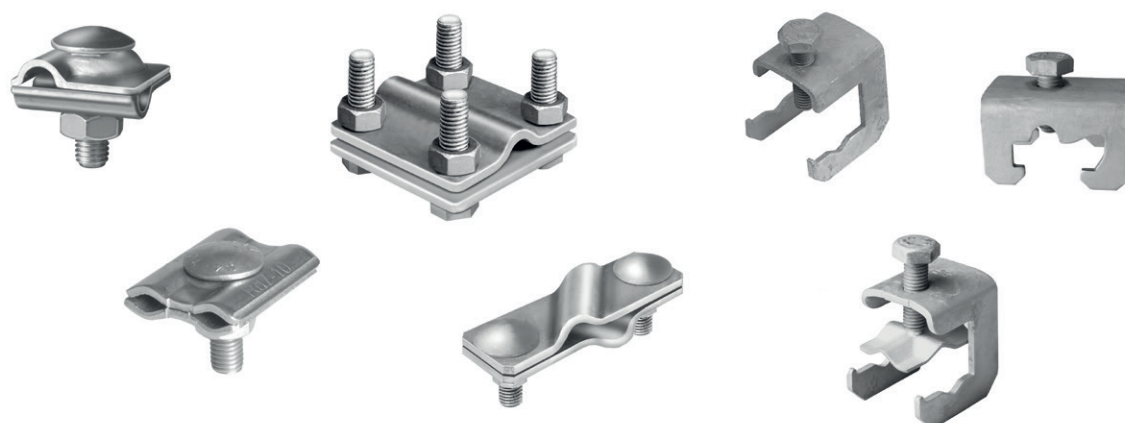
Following concreting: illustration shows the pump sump (light grey) and concreted foundation (dark grey).

Compared to in-situ concrete construction you can save between 200 and 500 euro, depending on the size of the pump sump.

LIGHTNING PROTECTION



Earth conductors
pages 108 – 110



Connectors
pages 111 – 116



Fixed earthing terminals, wall bushings + accessories
pages 117 – 128

Earth conductors

Dimensions and materials according to DIN EN 62561-2

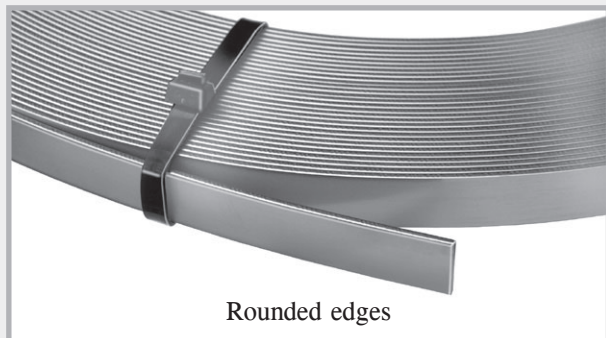
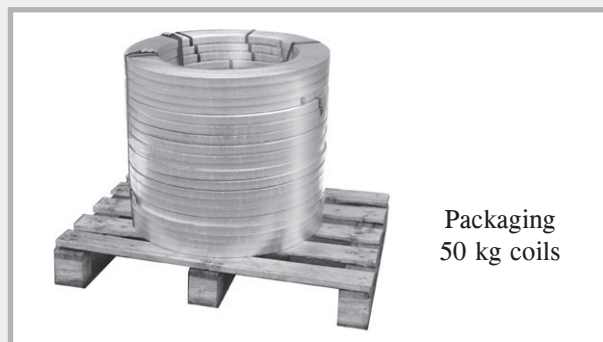
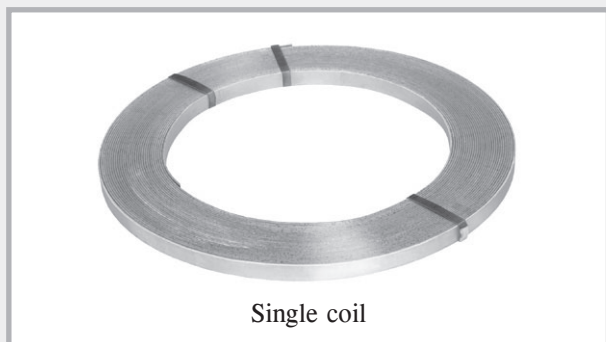
Earthing straps

Galvanised

Art. no.	Size	Material	PU	Secondary packaging	Price
100014	30 x 3.5 mm	Galvanised steel Z 500	Roll 25 kg = approx. 30 m	40 rolls per pallet	Current price available on request
100016	30 x 3.5 mm	Galvanised steel Z 500	Roll 50 kg = approx. 60 m	20 rolls per pallet	Current price available on request
100022	40 x 4.0 mm	Galvanised steel Z 500	Roll 50 kg = approx. 39 m	20 rolls per pallet	Current price available on request
100024	40 x 5.0 mm	Galvanised steel Z 500	Roll 50 kg = approx. 32 m	20 rolls per pallet	Current price available on request

Stainless steel

Art. no.	Size	Material	PU	Secondary packaging	Price
100028	30 x 3.5 mm	A2 stainless steel according to DIN EN 62561-2	Roll 25 kg = approx. 30 m	40 rolls per pallet	Current price available on request
100030	30 x 3.5 mm	A2 stainless steel according to DIN EN 62561-2	Roll 50 kg = approx. 60 m	20 rolls per pallet	Current price available on request
100031	30 x 3.5 mm	A4 stainless steel according to DIN EN 62561-2	Roll 25 kg = approx. 30 m	40 rolls per pallet	Current price available on request
100032	30 x 3.5 mm	A4 stainless steel according to DIN EN 62561-2	Roll 50 kg = approx. 60 m	20 rolls per pallet	Current price available on request
100035	40 x 4.0 mm	A4 stainless steel according to DIN EN 62561-2	Roll 50 kg = approx. 39 m	20 rolls per pallet	Current price available on request



Round wires



Single coil



Packaging

Galvanised

Art. no.	Size	Material	PU	Secondary packaging	Price
100040	Ø 8 mm	Galvanised steel Z 350	Roll 40 kg = approx. 100 m	24 rolls per pallet	Current price available on request
100041	Ø 10 mm	Galvanised steel Z 350	Roll 25 kg = approx. 40.5 m	40 rolls per pallet	Current price available on request
100042	Ø 10 mm	Galvanised steel Z 350	Roll 50 kg = approx. 81 m	20 rolls per pallet	Current price available on request



Single coil



Packaging

Stainless steel standard

Art. no.	Size	Material	PU	Secondary packaging	Price
100051	Ø 10 mm	A2 according to DIN EN 62561-2	Roll 25 kg = approx. 40.5 m	20 rolls per pallet	Current price available on request
100052	Ø 10 mm	A2 according to DIN EN 62561-2	Roll 50 kg = approx. 81 m	10 rolls per pallet	Current price available on request
100055	Ø 10 mm	A4 according to DIN EN 62561-2	Roll 25 kg = approx. 40.5 m	20 rolls per pallet	Current price available on request
100056	Ø 10 mm	A4 according to DIN EN 62561-2	Roll 50 kg = approx. 81 m	10 rolls per pallet	Current price available on request
NEW 100062	Ø 10 mm	A4 according to DIN EN 62561-2	Roll 31 kg = approx. 50 m	16 rolls per pallet	Current price available on request

Stainless steel SUPER-SOFT

A special manufacturing procedure ensures uniformly soft quality of the wire. SUPER-SOFT can be unrolled very easily and lies flat without undulation.



Single coil



Packaging

Art. no.	Size	Material	PU	Secondary packaging	Price
100061	Ø 10 mm	SUPER-SOFT A4 according to DIN EN 62561-2, ID 900 mm	25 kg = approx. 40.5 m	40	Current price available on request
100059	Ø 10 mm	SUPER-SOFT A4 according to DIN EN 62561-2, ID 900 mm	50 kg = approx. 81 m	20	Current price available on request

Round wires

Aluminium



Single coil



Packaging

Art. no.	Size	Material	PU	Secondary packaging	Price
100084	Ø 8 mm	ALU AlMgSi medium hard	20 kg = approx. 148 m	18 rolls per pallet	Current price available on request
100080	Ø 8 mm	ALU AlMgSi soft-twistable	20 kg = approx. 148 m	18 rolls per pallet	Current price available on request
100082	Ø 8/11 mm	ALU AlMgSi soft-twistable with halogen-free plastic coating	20 kg = approx. 100 m	18 rolls per pallet	Current price available on request
100088	Ø 10 mm	ALU AlMgSi soft	20 kg = approx. 95 m	18 rolls per pallet	Current price available on request



Single coil



Packaging

Copper

Art. no.	Size	Material	PU	Secondary packaging	Price
100090	Ø 8 mm	F 22 soft	50 kg = approx. 111 m	10 rolls per pallet	Current price available on request
100092	Ø 8 mm	F 25 medium hard	50 kg = approx. 111 m	10 rolls per pallet	Current price available on request



Single coil



Packaging

Steel with plastic coating

Art. no.	Size	Material	PU	Secondary packaging	Price
100060	Ø 10/13 mm	Galvanised steel Z 350 with plastic coating	50 kg = approx. 75 m	10 rolls per pallet	Current price available on request
100065	Ø 10/13 mm	Galvanised steel Z 350 with plastic coating	35 kg = approx. 52 m	15 rolls per pallet	Current price available on request

Connectors

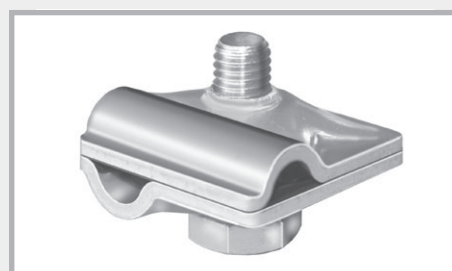
Multi-purpose connecting clamps with mushroom head bolt and protection against twisting



with mushroom head bolt and protection against twisting

Art. no.	Description	PU	Weight	Price
100147	Galvanised steel, 2-part, round/round clamping range: Ø 8 - 10 mm, M10 with mushroom head bolt and protection against twisting	1 carton of 50 pcs.	5.00 kg per carton	€0.88 per pc.
100149	V2A, 2-part, round/round clamping range: Ø 8 - 10 mm, M10 with mushroom head bolt and protection against twisting	1 carton of 50 pcs.	4.60 kg per carton	€2.49 per pc.
100150	V4A, 2-part, round/round clamping range: Ø 8 - 10 mm, M10 with mushroom head bolt and protection against twisting	1 carton of 50 pcs.	4.60 kg per carton	€3.70 per pc.

Multi-purpose connecting clamps with thread in lower part



Thread in lower part

Art. no.	Description	PU	Weight	Price
100157	Galvanised steel, 2-part, round/round clamping range: Ø 8 - 10 mm, M10 Thread in lower part	1 carton of 50 pcs.	4.50 kg per carton	€1.15 per pc.
100158	V2A, 2-part, round/round clamping range: Ø 8 - 10 mm, M10 Thread in lower part	1 carton of 50 pcs.	3.90 kg per carton	€2.60 per pc.
100159	V4A, 2-part, round/round clamping range: Ø 8 - 10 mm, M10 Thread in lower part	1 carton of 50 pcs.	3.80 kg per carton	€3.80 per pc.
100153	Aluminium, 2-part, round/round clamping range: 8-10 mm NIRO M10 screw Thread in lower part	1 carton of 50 pcs.	3.00 kg per carton	€1.30 per pc.
100154	Aluminium with spring washer, 2-part, round/round, clamping range 8-10 mm NIRO M10 screw Thread in lower part	1 carton of 50 pcs.	3.00 kg per carton	€1.45 per pc.
100155	Copper, 2-part, round/round clamping range: 8 mm NIRO M10 screw Thread in lower part	1 carton of 50 pcs.	6.00 kg per carton	€3.35 per pc.

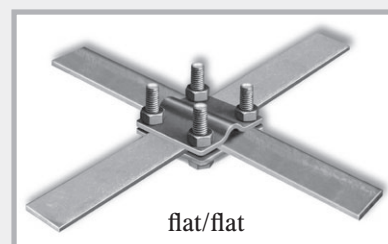
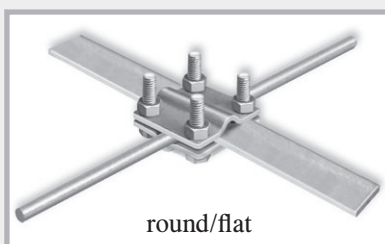
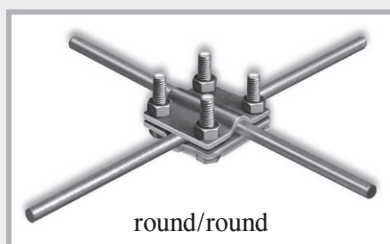
Connectors

Stainless steel cross connectors, round/round

Clamping range: round cond. Ø 8 + 10 mm, flat cond. up to 30 mm

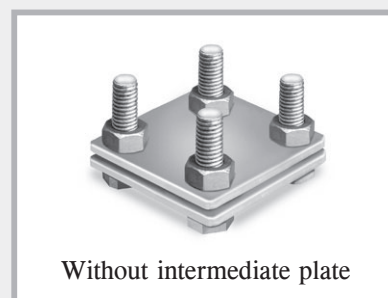
Universal for flat/flat, flat/round and round/round

Art. no.	Description	PU	Weight	Price
100143	V4A , 2-part, round/round universal heavy duty version, M8 screws	1 carton of 50 pcs.	9.60 kg per carton	€6.15 per pc.
100145	V4A , 2-part, round/round universal light version, M6 screws	1 carton of 50 pcs.	6.90 kg per carton	€4.45 per pc.



Galvanised cross connectors, flat/flat

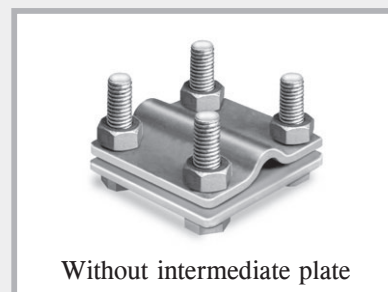
for earthing strap up to 30 mm wide



Art. no.	Description	PU	Weight	Price
100100	Galvanised steel , 2-part, flat/flat heavy duty version, M8 screws	1 carton of 50 pcs.	10.50 kg per carton	€1.65 per pc.
100106	Galvanised steel , 2-part, flat/flat light version, M6 screws	1 carton of 50 pcs.	7.50 kg per carton	€1.40 per pc.

Galvanised cross connectors, flat/round

for round conductors Ø 8 + 10 mm and earthing strap up to 30 mm width

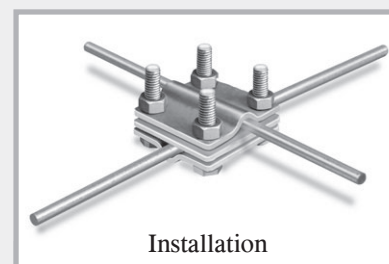
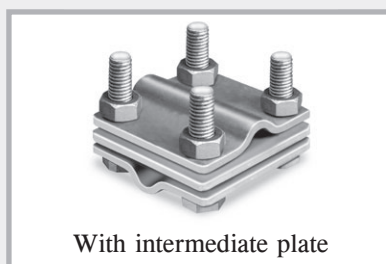
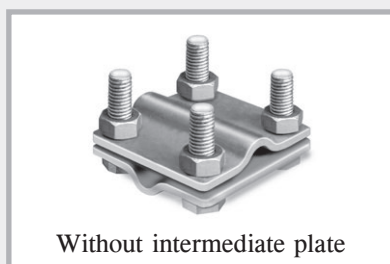


Art. no.	Description	PU	Weight	Price
100115	Galvanised steel , 2-part, flat/round heavy duty version, M8 screws	1 carton of 50 pcs.	10.70 kg per carton	€1.70 per pc.
100121	Galvanised steel , 2-part, flat/round light version, M6 screws	1 carton of 50 pcs.	7.60 kg per carton	€1.45 per pc.

Connectors

Galvanised cross connectors, round/round for round conductors Ø 8 + 10 mm

Art. no.	Description	PU	Weight	Price
100127	Galvanised steel , 2-part, round/round heavy duty version, M8 screws	1 carton of 50 pcs.	10.90 kg per carton	€1.80 per pc.
100130	Galvanised steel , 3-part, round/round heavy duty version, M8 screws With intermediate plate	1 carton of 50 pcs.	14.50 kg per carton	€2.40 per pc.
100133	Galvanised steel , 2-part, round/round light version, M6 screws	1 carton of 50 pcs.	7.70 kg per carton	€1.55 per pc.

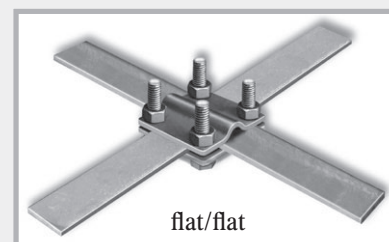
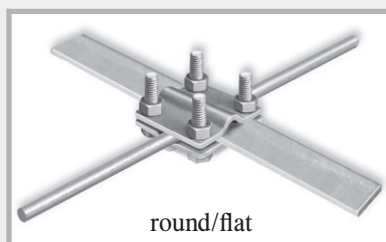
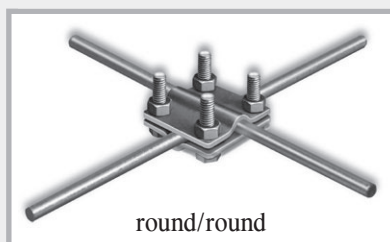


Galvanised cross connectors, round/round

Clamping range: round cond. Ø 8 + 10 mm, flat cond. 30 + 40 mm

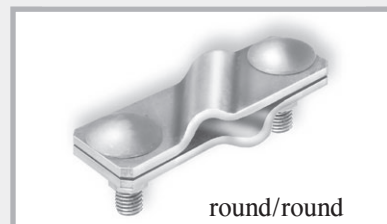
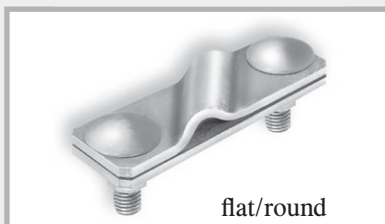
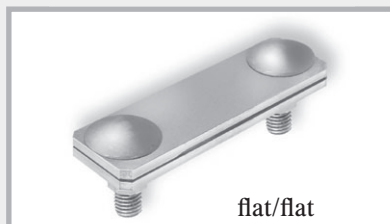
Universal for flat/flat, flat/round and round/round

Art. no.	Description	PU	Weight	Price
100129	Galvanised steel , 2-part Round/round heavy duty version, M8 screws	1 carton of 50 pcs.	17.80 kg per carton	€3.40



Connectors

Double clamps



Stainless steel double clamps

for earthing strip up to 40 mm width and round conductors 8-12 mm

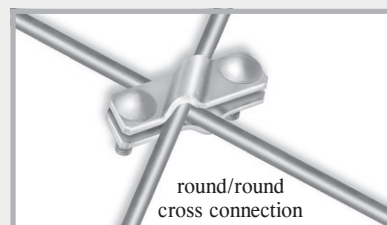
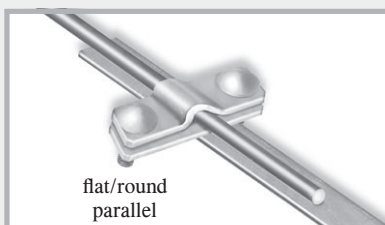
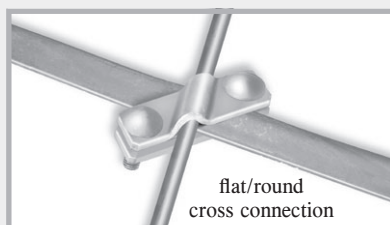
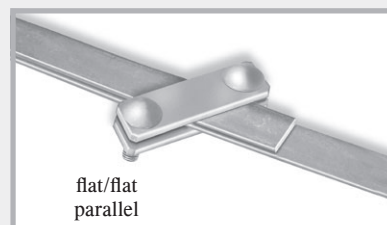
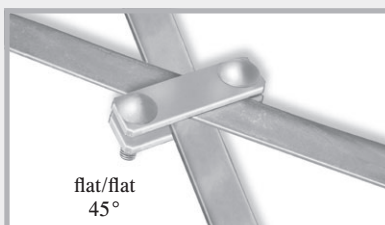
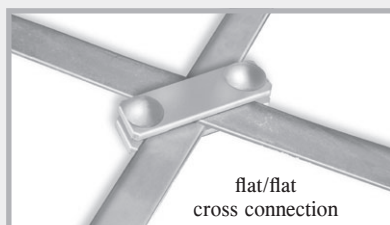
Art. no.	Description	PU	Weight	Price
100273	V4A, 2-part, flat/flat heavy duty version, M10 screws	1 carton of 50 pcs.	10.00 kg per carton	€5.85 per pc.
100279	V4A, 2-part, flat/round heavy duty version, M10 screws	1 carton of 50 pcs.	9.50 kg per carton	€5.85 per pc.
100282	V2A, 2-part, round/round heavy duty version, M10 screws	1 carton of 50 pcs.	9.50 kg per carton	€4.65 per pc.
100285	V4A, 2-part, round/round heavy duty version, M10 screws	1 carton of 50 pcs.	9.50 kg per carton	€5.85 per pc.

Galvanised double clamps

for earthing strip up to 40 mm width and round conductors 8-12 mm

Art. no.	Description	PU	Weight	Price
100220	Galvanised steel, 2-part, flat/flat heavy duty version, M10 screws	1 carton of 50 pcs.	12.20 kg per carton	€1.80 per pc.
100225	Galvanised steel, 2-part, flat/round heavy duty version, M10 screws	1 carton of 50 pcs.	11.60 kg per carton	€1.80 per pc.
100230	Galvanised steel, 2-part, round/round heavy duty version, M10 screws	1 carton of 50 pcs.	11.60 kg per carton	€1.80 per pc.

Possible clamping connections



Connectors

Single clamps

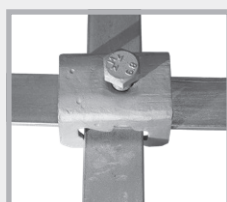
Art. no.	Description	PU	Weight	Price
100163	Galvanised steel , 1 M10 screw flat conductor up to 30 mm round conductor 8 + 10 mm for T, cross and parallel connections	1 carton of 50 pcs.	6.20 kg per carton	€1.45 per pc.
100162	V4A stainless steel , 1 M10 screw flat conductor up to 30 mm round conductor 8 + 10 mm for T, cross and parallel connections	1 carton of 50 pcs.	5.30 kg per carton	€4.85 per pc.



Single clamp



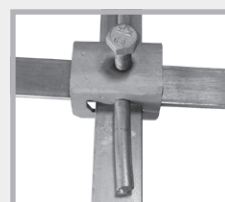
flat/flat
parallel connection



flat/flat
cross connection



flat/round
parallel connection




flat/flat/round
connection



Parallel connectors


Art. no.	Description	PU	Weight	Price
100240	Galvanised steel , 1 M10 screw 2-part, Ø 8-10 mm	1 carton of 50 pcs.	7.20 kg per carton	€1.55 per pc.
100243	V4A , 1 M10 screw 2-part, Ø 8-10 mm	1 carton of 50 pcs.	6.20 kg per carton	€4.65 per pc.

Wedge connector

Art. no.	Description	PU	Weight	Price	
100160	Galvanised steel round conductor Ø 10 mm flat conductor up to 40 mm with lock-in position in the wedge	1 carton of 50 pcs.	11.0 kg per carton	€1.70 per pc.	 Wedge connector



NEW! MAXI multi-purpose connecting clamp

for connection of round conductors to the reinforcement and conductive connection of reinforcing steel with up to 25 mm dia.

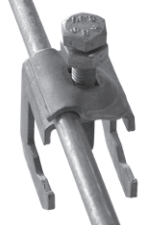

Art. no.	Description	PU	Weight	Price	
100148	Galvanised steel , round/round Round cond. Ø 8-16 mm / 15-25 mm Mushroom head bolt and protection against twisting	1 carton of 25 pcs.	11.25 kg per carton	€4.60	 Multi-purpose connecting clamp MAXI
100152	V4A , round/round Round cond. Ø 8-16 mm / 15-25 mm Mushroom head bolt and protection against twisting	1 carton of 25 pcs.	11.25 kg per carton	€12.90	

Connectors

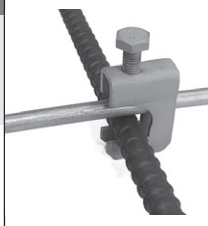
Connecting clamps for connection of flat conductor to reinforcement

Art. no.	Description	PU	Weight	Price	
100250	Galvanised steel , M10 screw flat conductor up to 30 mm constructional steel 6-22 mm	1 carton of 50 pcs.	6.60 kg per carton	€1.65 per pc.	 Art. no. 100250 Art. no. 100251
100251	Bright steel , M10 screw flat conductor up to 30 mm constructional steel 6-22 mm	1 carton of 50 pcs.	6.60 kg per carton	€1.50 per pc.	
100253	Galvanised steel , M10 screw flat conductor up to 40 mm constructional steel 6-22 mm	1 carton of 50 pcs.	6.60 kg per carton	€1.80 per pc.	 Art. no. 100252 Art. no. 100253
100252	V4A stainless steel , M10 screw flat conductor up to 40 mm constructional steel 6-22 mm	1 carton of 50 pcs.	5.40 kg per carton	€5.15 per pc.	

Connecting clamps for connection of flat and round conductors to reinforcement

Art. no.	Description	PU	Weight	Price	
100255	Galvanised steel , M10 screw flat conductor up to 30 mm, round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	9.40 kg per carton	€2.35 per pc.	 Art. no. 100255 Art. no. 100256 Art. no. 100257
NEW! 100256	Bright steel , M10 screw flat conductor up to 30 mm, round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	9.40 kg per carton	€2.15 per pc.	
100257	V4A stainless steel , M10 screw flat conductor up to 30 mm, round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	8.20 kg per carton	€6.60 per pc.	
NEW! 100146	Universal connecting clamp with pressure plate Galvanised steel , M10 screw flat conductor up to 30 mm, round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	7.50 kg per carton	€2.70 per pc.	 Pressure plate Art. no. 100146 Art. no. 100254
NEW! 100254	Universal connecting clamp with pressure plate V4A , M10 screw flat conductor up to 30 mm round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	7.00 kg per carton	€6.90 per pc.	

Connecting clamps for connection of round conductor to reinforcement

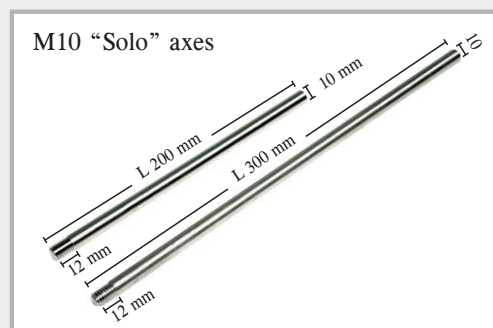
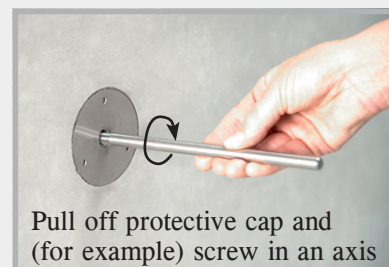
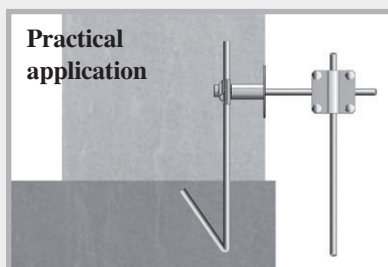
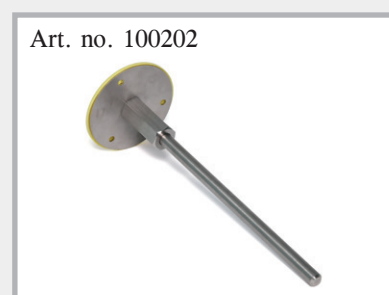
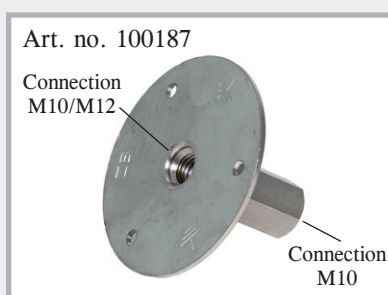
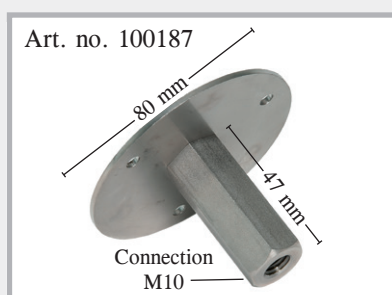
Art. no.	Description	PU	Weight	Price	
100259	Galvanised steel , M10 screw round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	5.80 kg per carton	€1.70 per pc.	 Art. no. 100259 Art. no. 100260 Art. no. 100261
NEW! 100261	Bright steel , M10 screw round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	5.80 kg per carton	€1.60 per pc.	
100260	V4A stainless steel , M10 screw round conductor 8 + 10 mm constructional steel 6-22 mm	1 carton of 50 pcs.	5.10 kg per carton	€4.75 per pc.	

Fixed earthing terminals, wall bushings + accessories

Fixed earthing terminal M10/M12

to connect the equipotential bonding conductors to the foundation earth, reinforcement and lightning protection system

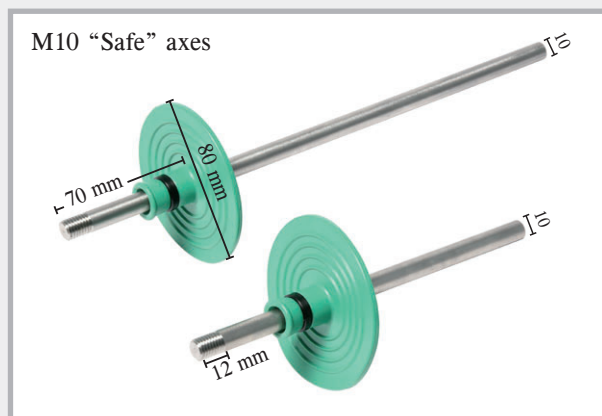
Art. no.	Description	PU	Weight	Price
100187	Fixed earthing terminal M10/M12 V4A without axis, with yellow protective cap connection M10 + M12	1 carton of 10 pcs.	1.90 kg per carton	€10.65 per pc.
100202	Fixed earthing terminal M10/M12 V4A with mounted, galvanised axis, L 200 mm with yellow protective cap	1 carton of 10 pcs.	3.10 kg per carton	€14.45 per pc.
100200	Fixed earthing terminal M10/M12 V4A with mounted A2 multi-purpose connecting clamp with yellow protective cap	1 carton of 10 pcs.	2.50 kg per carton	€13.15 per pc.



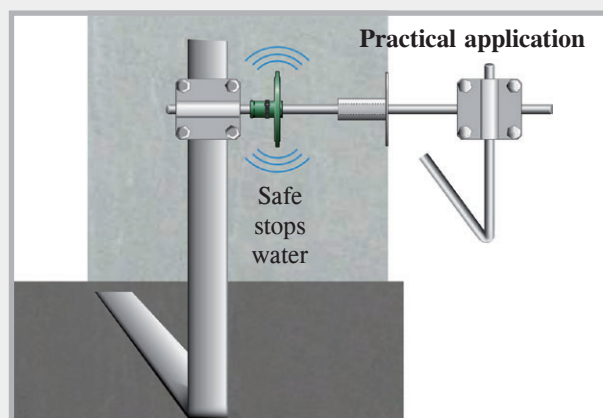
M10 "Solo" axes for fixed earthing terminal

Art. no.	Description	PU	Weight	Price
100183	galvanised, length 200 mm	Carton of 50 pcs.	6.50 kg/carton	€3.75/pc.
100185	galvanised, length 300 mm	Carton of 50 pcs.	9.80 kg/carton	€5.50/pc.
100184	V4A, length 200 mm	Carton of 50 pcs.	6.50 kg/carton	€5.40/pc.
100186	V4A, length 300 mm	Carton of 50 pcs.	9.80 kg/carton	€8.05/pc.

M10 “Safe” axes for fixed earthing terminal Pressure water-tight

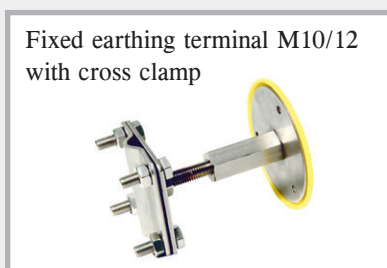


Art. no.	Description	PU	Weight	Price
100177	galvanised, length 200 mm	1 pc.	0.15 kg/pc.	€12.80/pc.
100178	galvanised, length 300 mm	1 pc.	0.21 kg/pc.	€14.70/pc.
100179	V4A, length 200 mm	1 pc.	0.15 kg/pc.	€14.45/pc.
100180	V4A, length 300 mm	1 pc.	0.21 kg/pc.	€17.25/pc.



Cross clamps for fixed earthing terminals M10/12

Art. no.	Description	PU	Weight	Price
100188	Cross clamp for fixed earthing terminal M10/12, galvanised Thread M10, round 8 + 10 mm flat up to 40 mm, thread length 70 mm	Carton of 10 pcs.	3.90 kg per carton	€10.25 per pc.
100189	Cross clamp for fixed earthing terminal M10/12, A4 stainless steel Thread M10, round 8 + 10 mm flat up to 40 mm, thread length 70 mm	Carton of 10 pcs.	3.20 kg per carton	€16.40 per pc.



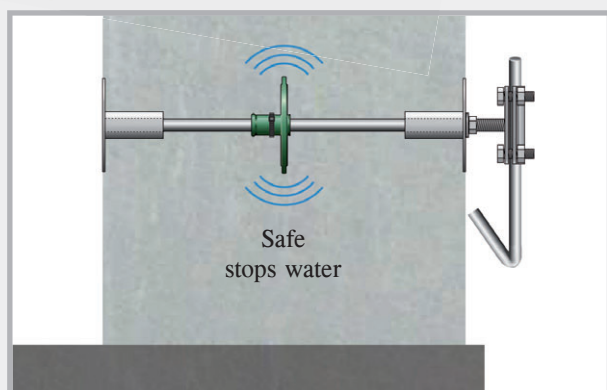
Fixed earthing terminal with screwed in cross clamp.
Round and flat conductors can be connected.

M10 wall bushings with pre-assembled fixed earthing terminals

The M10 wall bushings are pre-assembled and supplied in the exact wall thickness. Time-consuming adjustments are not required.

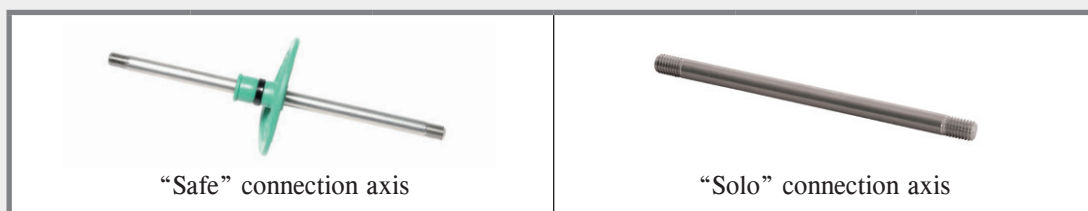
Fixed earthing terminal in stainless steel V4A, connection axes 10 mm stainless steel

Wall thickness	Art. no.	Weight	Price	Art. no.	Weight	Price
200 mm	100394	0.45 kg	€39.15/pc.	100444	0.43 kg	€30.00/pc.
240 mm	100396	0.46 kg	€40.40/pc.	100446	0.44 kg	€31.25/pc.
250 mm	100398	0.47 kg	€40.80/pc.	100448	0.45 kg	€31.55/pc.
300 mm	100400	0.50 kg	€42.25/pc.	100450	0.48 kg	€33.10/pc.
350 mm	100402	0.53 kg	€43.80/pc.	100452	0.51 kg	€34.65/pc.
365 mm	100404	0.54 kg	€44.30/pc.	100454	0.52 kg	€35.15/pc.
400 mm	100406	0.57 kg	€45.35/pc.	100456	0.55 kg	€36.30/pc.



M10 connection axis for wall bushings

Stainless steel, diameter 10 mm, M10 thread at both ends,
length of thread 12 mm

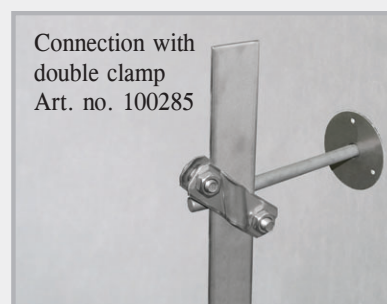
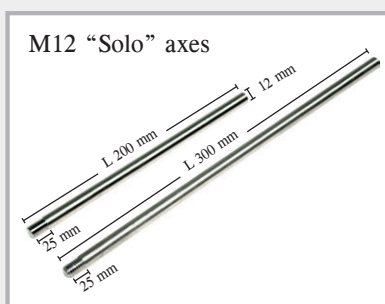
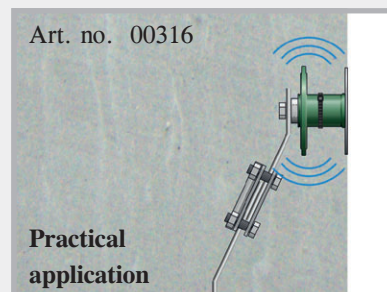
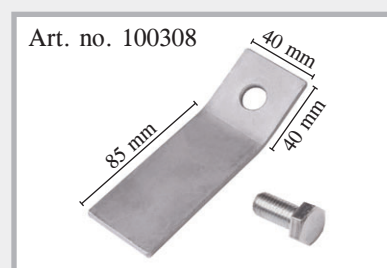
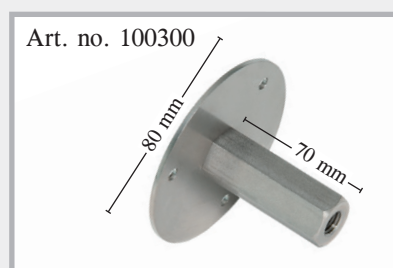


Wall thickness	Art. no.	Weight	Price	Art. no.	Weight	Price
200 mm	100360	0.12 kg	€15.80/pc.	100410	0.10 kg	€6.60/pc.
240 mm	100365	0.13 kg	€17.00/pc.	100415	0.11 kg	€7.85/pc.
250 mm	100370	0.14 kg	€17.45/pc.	100420	0.11 kg	€8.15/pc.
300 mm	100375	0.17 kg	€18.85/pc.	100425	0.14 kg	€9.70/pc.
350 mm	100380	0.20 kg	€20.40/pc.	100430	0.17 kg	€11.25/pc.
365 mm	100385	0.21 kg	€20.95/pc.	100435	0.18 kg	€11.75/pc.
400 mm	100390	0.23 kg	€21.95/pc.	100440	0.20 kg	€12.90/pc.

Fixed earthing terminal M12

NEW! to connect the equipotential bonding conductors to the foundation earth, reinforcement and lightning protection system

Art. no.	Description	PU	Weight	Price
100300	Fixed earthing terminal M12 V4A with yellow protective cap Connection M12	1 carton of 10 pcs.	2.00 kg per carton	€11.65 per pc.
100304	M12 "Safe" fixed earthing terminal with yellow protective cap and waterstop Connection M12	1 carton of 10 pcs.	2.40 kg per carton	€19.65 per pc.
100308	Connecting plate 40 x 4 mm incl. screw M12 x 25	1 carton of 10 pcs.	2.00 kg per carton	€3.80 per pc.
100312	Fixed earthing terminal M12 with connecting plate and yellow protective cap Connection M12	1 carton of 10 pcs.	4.00 kg per carton	€15.45 per pc.
100316	Fixed earthing terminal M12 "Safe" with connecting plate and yellow protective cap Connection M12	1 carton of 10 pcs.	4.40 kg per carton	€23.45 per pc.



NEW! M12 "Solo" axes for fixed earthing terminal

Art. no.	Description	PU	Weight	Price
101170	galvanised, length 200 mm	Carton of 50 pcs.	8.00 kg/carton	€4.15/pc.
101172	galvanised, length 300 mm	Carton of 50 pcs.	12.0 kg/carton	€6.05/pc.
101174	V4A, length 200 mm	Carton of 50 pcs.	8.00 kg/carton	€5.95/pc.
101176	V4A, length 300 mm	Carton of 50 pcs.	12.0 kg/carton	€8.85/pc.

NEW! M12 “Safe” axes
for fixed earthing terminal
Pressure water-tight

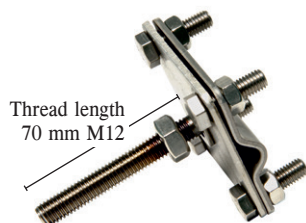


Art. no.	Description	PU	Weight	Price
101180	galvanised, length 200 mm	1 pc.	0.19 kg/pc.	€14.10/pc.
101182	galvanised, length 300 mm	1 pc.	0.27 kg/pc.	€16.20/pc.
101184	V4A, length 200 mm	1 pc.	0.19 kg/pc.	€15.90/pc.
101186	V4A, length 300 mm	1 pc.	0.27 kg/pc.	€19.00/pc.

NEW! Cross clamps for fixed earthing terminals M12

Art. no.	Description	PU	Weight	Price
100460	Cross clamp for fixed earthing terminal M12, galvanised Thread M12, thread length 70 mm Clamping range: round 8 + 10 mm, flat up to 40 mm	Carton of 10 pcs.	3.90 kg per carton	€10.90 per pc.
100462	Cross clamp for fixed earthing terminal M12, V4A Thread M12, thread length 70 mm Clamping range: round 8 + 10 mm, flat up to 40 mm	Carton of 10 pcs.	3.90 kg per carton	€16.90 per pc.
100464	Cross clamp for fixed earthing terminal M12, V4A Thread M12, thread length 200 mm Clamping range: round 8 + 10 mm, flat up to 40 mm	Carton of 10 pcs.	4.25 kg per carton	€19.00 per pc.

Art. no. 100460 + 100462



Art. no. 100464



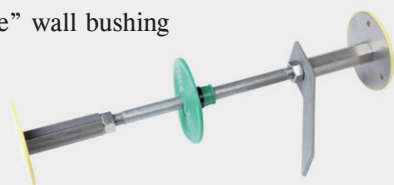
M12 wall bushings with pre-assembled fixed earthing terminals

NEW! The M12 wall bushings are pre-assembled and supplied in the exact wall thickness. Time-consuming adjustments are not required.

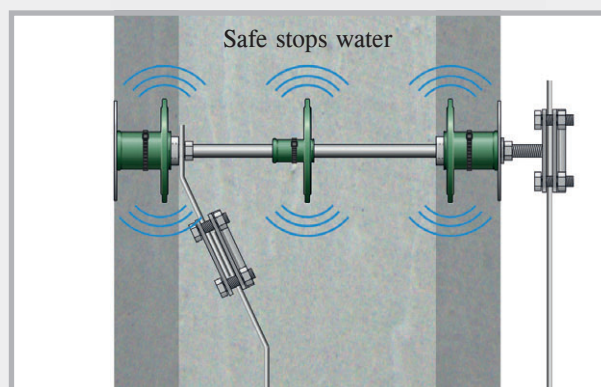
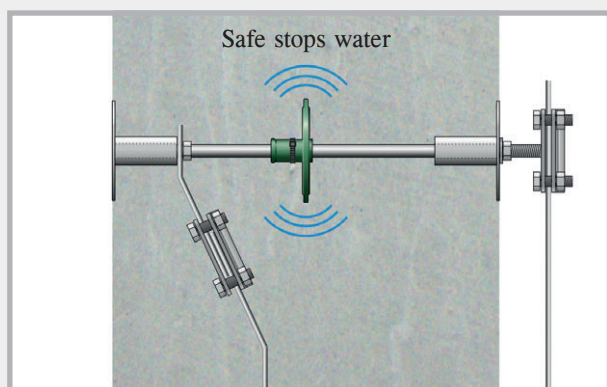
Fixed earthing terminal in stainless steel V4A, connection axes 12 mm stainless steel incl. connecting plate 4 x 40 mm

Wall thickness	Art. no.	Weight	Price	Art. no.	Weight	Price
200 mm	100334	0.53 kg	€43.10/pc.	100348	0.61 kg	€59.10/pc.
240 mm	100336	0.57 kg	€44.45/pc.	100350	0.65 kg	€60.45/pc.
250 mm	100338	0.58 kg	€44.90/pc.	100352	0.66 kg	€60.90/pc.
300 mm	100340	0.62 kg	€46.50/pc.	100354	0.70 kg	€62.50/pc.
350 mm	100342	0.67 kg	€48.20/pc.	100356	0.75 kg	€64.20/pc.
365 mm	100344	0.68 kg	€48.80/pc.	100358	0.76 kg	€64.80/pc.
400 mm	100346	0.72 kg	€49.90/pc.	100359	0.80 kg	€65.90/pc.

M12 "Safe" wall bushing

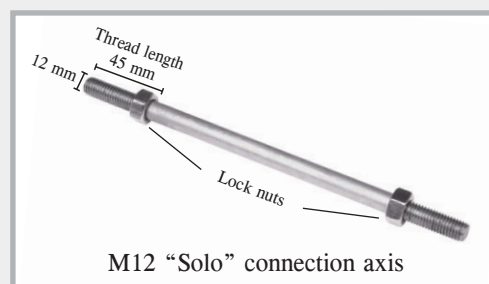


M12 "DW Safe" wall bushing



M12 connection axis for wall bushings

NEW! Stainless steel,
diameter 12 mm,
M12 thread at both ends, length of thread 45 mm,
incl. 2 lock nuts



M12 "Solo" connection axis

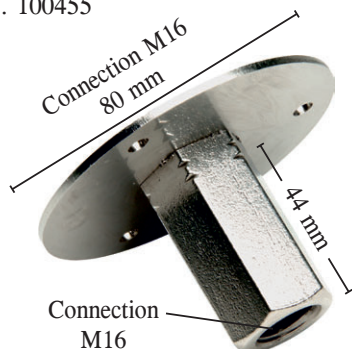
Art. no.	Wall thickness	PU	Weight	Price
100320	200 mm	1 pc.	0.10 kg	€7.30/pc.
100322	240 mm	1 pc.	0.14 kg	€8.65/pc.
100324	250 mm	1 pc.	0.15 kg	€9.00/pc.
100326	300 mm	1 pc.	0.19 kg	€10.70/pc.
100328	350 mm	1 pc.	0.24 kg	€12.40/pc.
100330	365 mm	1 pc.	0.25 kg	€12.95/pc.
100332	400 mm	1 pc.	0.29 kg	€14.20/pc.

Fixed earthing terminal M16

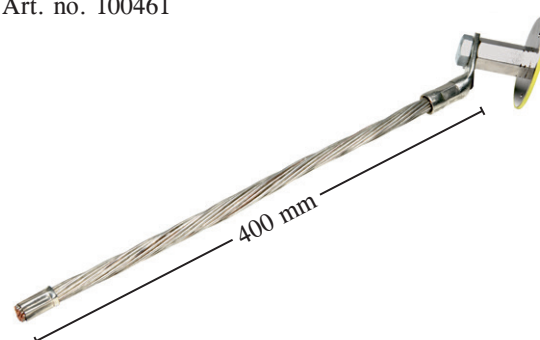
to connect the equipotential bonding conductors to the foundation earth electrode, reinforcement and lightning protection system

Art. no.	Description	PU	Weight	Price
100455	Fixed earthing terminal M16 V4A without axis with yellow protective cap Connection M16	Carton of 10 pcs.	2.00 kg per carton	€17.50 per pc.
100461	Fixed earthing terminal M16 V4A with flexible connection conductor Connection conductor CU/SN 95 mm ² Conductor length 400 mm	1 pc.	0.75 kg per pc.	€57.70 per pc.

Art. no. 100455



Art. no. 100461



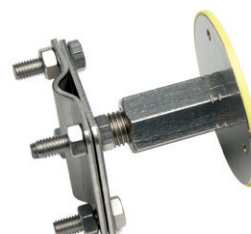
Cross clamps for fixed earthing terminals M16

Art. no.	Description	PU	Weight	Price
100458	Cross clamp for fixed earthing terminal M16, A4 stainless steel Thread M16, round 8 + 10 mm flat up to 40 mm Thread length 30 mm	Carton of 10 pcs.	3.20 kg per carton	€18.45 per pc.


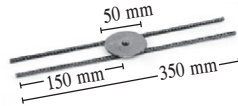
Art. no. 100458



Fixed earthing terminal M16 with cross clamp



Accessories for fixed earthing terminal

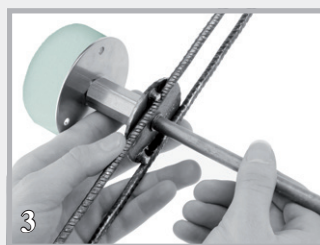
Art. no.	Description	PU	Weight	Price	
100198	Plastic foam for fixed earthing terminal self-adhesive on one side Ø 76 mm, thickness 20 mm	Bag of 10 pcs.	0.10 kg	€1.50 per pc.	
100196	Fixing spider for fixed earthing terminal steel/bright	1 pc.	0.13 kg	€8.15 per pc.	



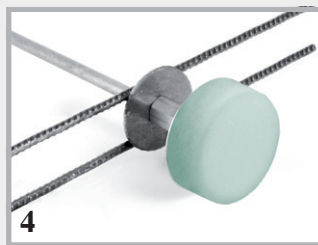
1 Remove protective cap of fixed earthing terminal



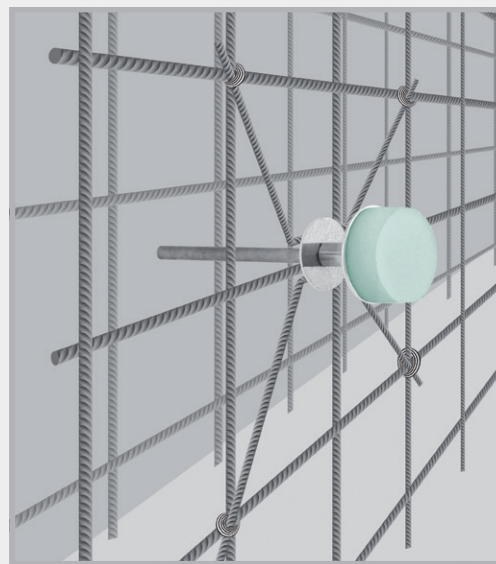
2 Stick on plastic foam



3 Screw axis through the fixing spider and fasten fixed earthing terminal



4 Installation complete



Fixed earthing terminal with fixing spider on the reinforcement

Lightning protection accessories

MultiCap

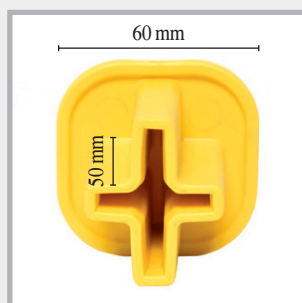
Protective cap
to DIN 18014

PVC protective cap
for round and flat conductors

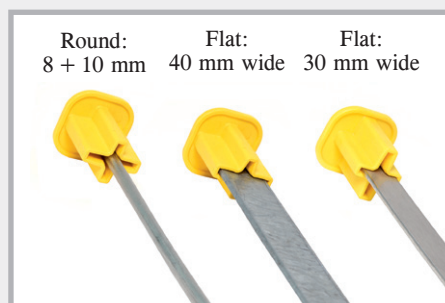


Art. no.	Description	PU	Weight	Price
100500	MultiCap , colour: yellow area of application: round conductor: 8 + 10 mm flat conductor: 30 x 3.5 mm 40 x 4.0 mm 30 x 3.0 mm 40 x 5.0 mm	Bag of 100 pcs.	5.10 kg per bag	€1.00 per pc.

Technical data



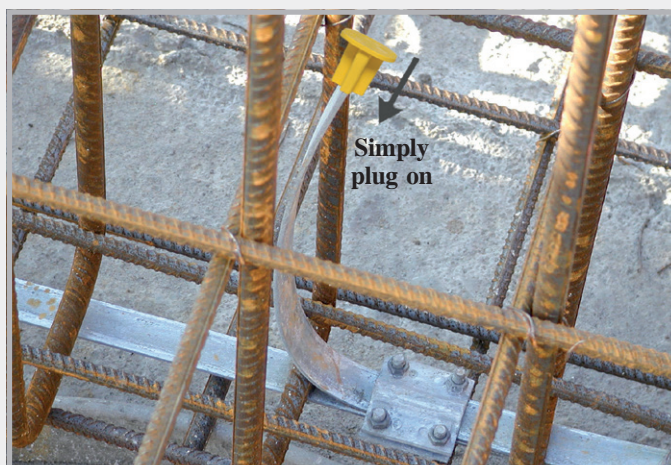
Material: PVC,
large labelled safety cap
60 x 60 mm,
long mounting slot 50 mm



Round: 8 + 10 mm
Flat: 40 mm wide
Flat: 30 mm wide



MultiCap can be used universally



Description

- No risk of injury
- Simply plug on
- Yellow signal colour
- One protection cap for 6 sizes

 YouTube



Excerpt from DIN 18014

Foundation earth electrode:

For safety reasons, the terminal lugs must be prominently marked during the construction phase.

Lightning protection accessories

Terminal lugs

Round conductor rods, bevelled



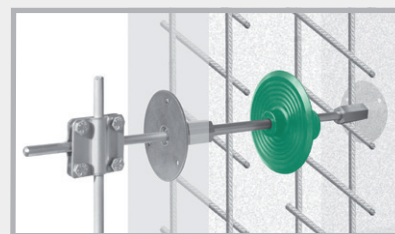
Round conductor rods, bevelled

Art. no.	Description	Length	Packaging	Weight	Price
100555	A4 round conductor Ø 10 mm	1.50 m	Bundle of 10 pcs.	9.40 kg/bundle	€11.90/pc.
100560	A4 round conductor Ø 10 mm	2.00 m	Bundle of 10 pcs.	12.40 kg/bundle	€15.85/pc.
100565	A4 round conductor Ø 10 mm	2.50 m	Bundle of 10 pcs.	15.60 kg/bundle	€19.80/pc.
100570	A4 round conductor Ø 10 mm	3.00 m	Bundle of 10 pcs.	18.80 kg/bundle	€23.75/pc.

RONDO

Sealing collars for lightning protection wire and earthing strap

RONDO sealing collars form pressure water-tight seals for lightning protection wires and earthing straps passing through concrete walls, floor slabs and shafts.



Art. no.	Description	PU	Secondary packaging	Weight	Price
090890	RONDO RO 10 for lightning protection conductor 8 + 10 mm	1 pc.	Carton of 100 pcs.	0.13 kg	€18.45 per pc.
090892	RONDO RO flat for earthing strap 30x3.5 + 30x3.0 mm	1 pc.		0.17 kg	€19.55 per pc.
NEW! 090988	RONDO EFP For hexagon fixed earthing terminal	1 pc.		0.04 kg	€8.00 per pc.



RONDO RO 10



RONDO RO flat



RONDO EFP



RONDO RO 10, mounted



RONDO RO flat, mounted

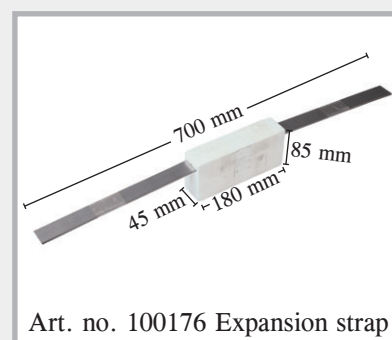
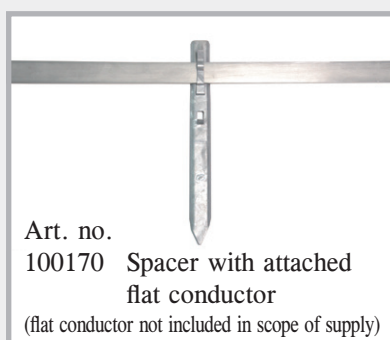
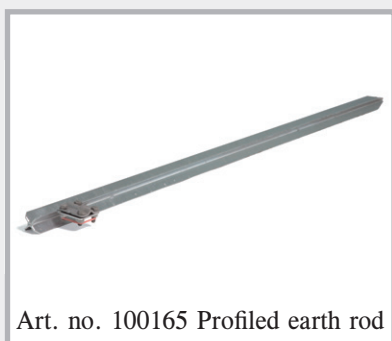


RONDO EFP, mounted

The sealing collars are supplied with fastening straps, ready for installation

Lightning protection accessories

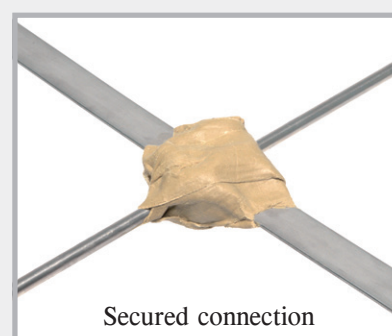
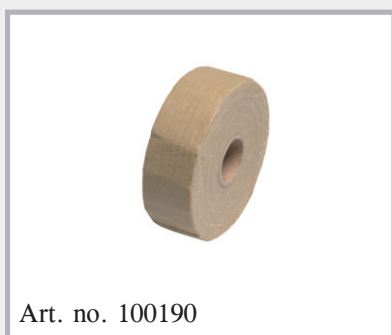
Art. no.	Description	PU	Weight	Price
100165	Profiled earth rod, 1.5 m long, galvanised cross profile 50 x 50 mm with cross clamp welded on	1 pc.	4.30 kg per pc.	€23.90 per pc.
100170	Spacer for foundation earth electrode galvanised , for round conductors Ø 8-10 mm earthing strap 30 x 3.5 mm length 280 mm, installation spacing 1-1.5 m	Carton of 100 pcs.	10.30 kg per carton	€2.40 per pc.
NEW! 100176	Expansion strap with polystyrene body, V2A Leading of foundation earth electrode through expansion joints	1 pc.	0.68 kg per pc.	€25.90 per pc.



Anti-corrosive tapes

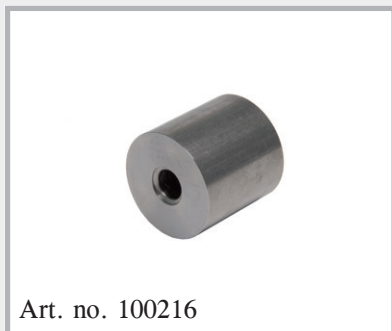
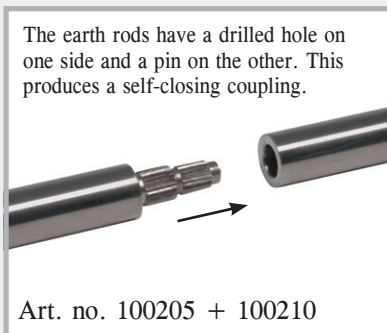
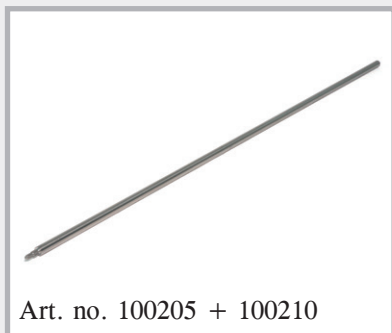
For wrapping of overground and underground connections.

Art. no.	Description	PU	Weight	Price
	Anti-corrosive tapes Roll length 10 m certified by DVGW			
100190	Size: 1.5 x 50 mm	Carton of 24 rolls	1.00 kg/roll	€7.10/roll
100193	Size: 1.5 x 100 mm	Carton of 12 rolls	2.10 kg/roll	€14.15/roll




Earth rod for use in earthing systems

Art. no.	Design	PU	Weight	Price
100205	Earth rod for the installation of earthing systems galvanised material Length: 1500 mm Ø 20 mm	1 pc.	3.60 kg per pc.	€12.55 per pc.
100210	Earth rod for the installation of earthing systems A4 stainless steel Length: 1500 mm Ø 20 mm	1 pc.	3.60 kg per pc.	€65.00 per pc.
100215	Impact tip to drive in the first earth rod bright steel	1 pc.	0.04 kg per pc.	€7.15 per pc.
100216	Drive-in aid for earth rod bright steel	1 pc.	0.55 kg per pc.	€8.15 per pc.
100218	Connecting clamp for earth rod galvanised material round 8 + 10 mm flat up to 40 mm	1 pc.	0.38 kg per pc.	€4.95 per pc.
100217	Connecting clamp for earth rod A4 stainless steel round 8 + 10 mm flat up to 40 mm	1 pc.	0.30 kg per pc.	€12.60 per pc.

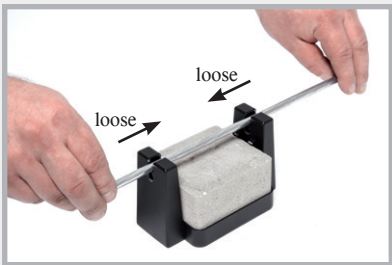
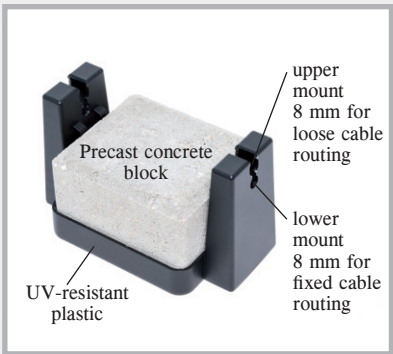


MultiClip roof conductor holder

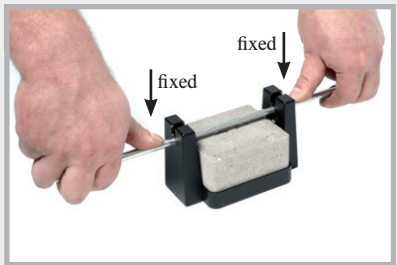
For loose and fixed wire routing

Art. no.	Design	PU	Secondary packaging	Weight	Price	
100470	MultiClip roof conductor holder for flat roofs mount 8 mm holder made of UV-resistant plastic stone made of concrete	10 pcs.	1000 pcs. per pallet	1.00 kg per pc.	€0.97 per pc.	 Roof conductor holder

Product description

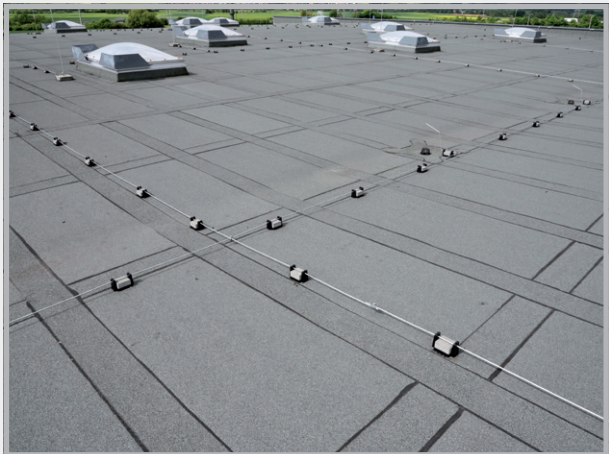
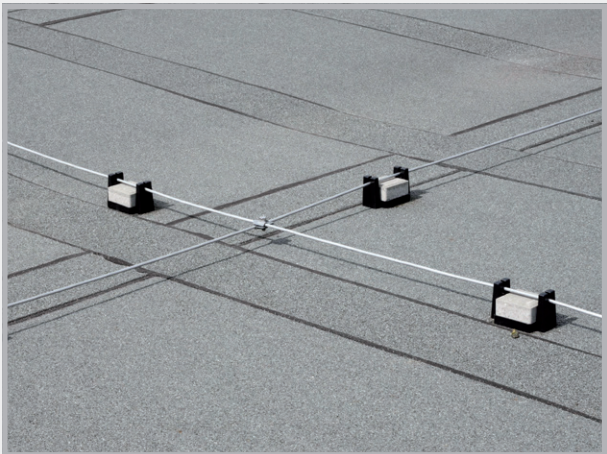


Pushing the round conductor into the upper mount. The wire is locked in place but can be moved.



Pushing the wire through into the lower mount. The wire is permanently locked in place.

At the construction site



Basic principles of the installation of lightning protection conductors and connectors

FOUNDATION EARTH ELECTRODE

- Installation location: In the concrete of the foundation and floor slab with minimum of 5 cm concrete cover on all sides
- Material: Galvanised or non-galvanised steel as flat conductor 30 x 3.5 mm or round conductor DN 10 mm

CONNECTION PARTS ON FOUNDATION EARTH ELECTRODE

- Installation location: In subsoil
- Material: Galvanised steel with plastic sheathing or A4 stainless steel material grades 1.4401, 1.4404, 1.4571
Flat conductor 30 x 3.5 mm or round conductor DN 10 mm

RING EARTH ELECTRODE AND CONNECTION PARTS ON RING EARTH ELECTRODE

- Installation location: Outside the foundation in the subsoil
- Material: A4 stainless steel material grades 1.4401, 1.4404, 1.4571 as 30 x 3.5 mm flat conductor or DN 10 mm round conductor
Galvanised material is not permitted in this area

CONNECTORS

- Installation location: In subsoil, connectors made of A4 stainless steel, galvanised in foundation
- Design: Wedge connectors are not permitted: unless installed in non-vibrated concrete.
4 x M 6 screws only above ground and for arrester lines and down conductors,
4 x M 8 or 2 x M 10 screws as well as the M 10 multi-purpose connecting clamp for the following areas: subsoil, concrete, above ground, down conductors and arrester lines.

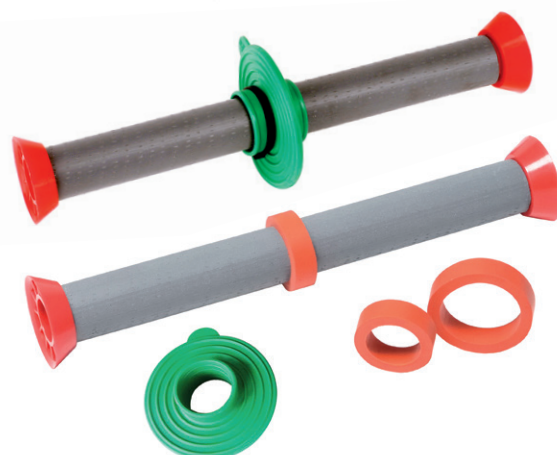
- DIN STANDARDS DIN EN 62561-1 and 62561-2

- COSTS The cost of stainless steel round conductors is up to 33% less than stainless steel flat conductors. The round conductor, which can be installed as an alternative to the flat conductor, is easier to handle and therefore has a significantly higher workability.

FORMWORK ACCESSORIES



STOPPER SCREW + STOPPER
pages 132 – 135



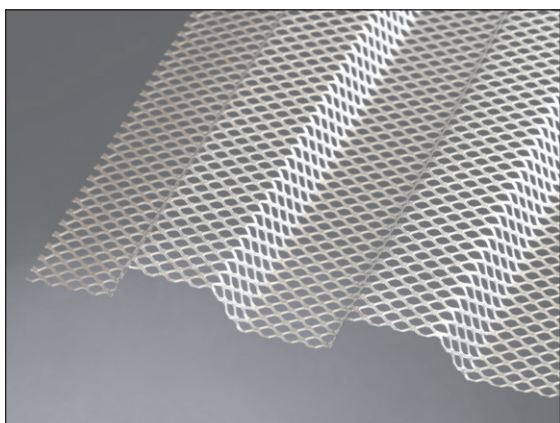
ActiveRings + RONDO MINI
pages 137 – 140



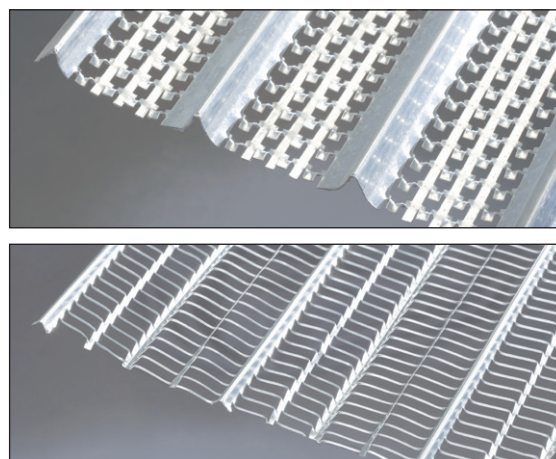
Damp proof courses
pages 141 – 143



**Impact sound insulation +
corrugated bearings**
pages 144 – 147



LinkFix stopend panel
Profile according to DIN 1045-1 and EC 2
page 148



Rib laths
pages 148 – 149

STOPPER SCREW



NEW! Screwed inner seals for pressure water and gas-tight sealing of formwork tie points

■ Water pressure tight up to 50 m water column ■ Radon-tight

STOPPER SCREW

Technical details page 136

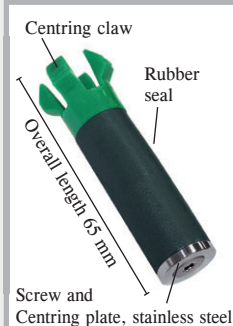
Art. no.	Description	Tie point inner diameter	PU	Weight	Price
046230	STOPPER SCREW Type 3 in Overall length: 65 mm	17 to 19.5 mm	100 pcs. incl. 2 bits	2.60 kg per 100 pcs.	1.85 € per pc.
046240	STOPPER SCREW Type 4 in Overall length: 65 mm	19.5 to 22 mm	100 pcs. incl. 2 bits	3.10 kg per 100 pcs.	1.90 € per pc.
046210	STOPPER SCREW Type 1 in Overall length: 65 mm	21.5 to 23 mm	100 pcs. incl. 2 bits	3.55 kg per 100 pcs.	1.90 € per pc.
046220	STOPPER SCREW Type 2 in Overall length: 65 mm	22.3 to 25.4 mm	100 pcs. incl. 2 bits	3.80 kg per 100 pcs.	2.00 € per pc.
046250	STOPPER SCREW Type 5 in Overall length: 65 mm	25 to 28 mm	100 pcs. incl. 2 bits	4.55 kg per 100 pcs.	2.15 € per pc.
046330	STOPPER SCREW Type 3 covered Cover plate 28 mm Overall length: 65 mm	17 to 19.5 mm	100 pcs. incl. 2 bits	3.70 kg per 100 pcs.	2.05 € per pc.
046340	STOPPER SCREW Type 4 covered Cover plate 28 mm Overall length: 65 mm	19.5 to 22 mm	100 pcs. incl. 2 bits	4.60 kg per 100 pcs.	2.10 € per pc.
046310	STOPPER SCREW Type 1 covered Cover plate 28 mm Overall length: 65 mm	21.5 to 23 mm	100 pcs. incl. 2 bits	4.70 kg per 100 pcs.	2.10 € per pc.
046320	STOPPER SCREW Type 2 covered Cover plate 32 mm Overall length: 65 mm	22.3 to 25.4 mm	100 pcs. incl. 2 bits	4.95 kg per 100 pcs.	2.20 € per pc.
046350	STOPPER SCREW Type 5 covered Cover plate 32 mm Overall length: 65 mm	25 to 28 mm	100 pcs. incl. 2 bits	6.10 kg per 100 pcs.	2.35 € per pc.
046170	Cleaning brush for tube 21.5-26 mm		1 pc.	0.11 kg per pc.	10.60 € per pc.
046181	STOPPER SCREW positioning aid		1 pc.	0.27 kg per pc.	29.90 € per pc.



STOPPER SCREW
Type 1 in



STOPPER SCREW
Type 1 covered



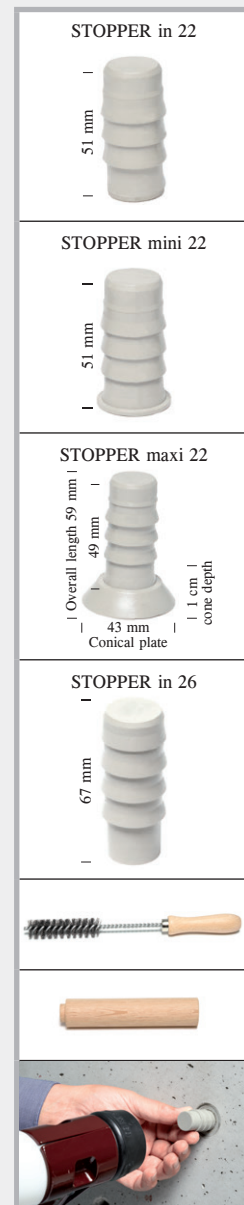
STOPPER

Inner seals for plastic and
fibre cement distance tubes

STOPPER



Art. no.	Description	PU	Weight	Price
046140	STOPPER in 22 for distance tubes inner diameter 21.5-23 mm	Bucket of 250 pcs.	6.00 kg per bucket	€0.89 per pc.
046150	STOPPER mini 22 for distance tubes inner diameter 21.5-23 mm	Bucket of 250 pcs.	6.00 kg per bucket	€0.89 per pc.
046160	STOPPER maxi 22 for distance tubes inner diameter 21.5-23 mm	Bucket of 250 pcs.	9.00 kg per bucket	€1.07 per pc.
046163	STOPPER in 26 for distance tubes Inner diameter 26 mm	Bucket of 250 pcs.	10.50 kg per bucket	€1.20 per pc.
046170	Cleaning brush for tube 21.5-26 mm	1 pc.	0.11 kg per pc.	€10.60 per pc.
046180	Drive-in aid for STOPPER 22 + 26 mm	1 pc.	0.10 kg per pc.	€3.70 per pc.



Use a 1500-2000 g hard rubber mallet to drive in the STOPPER.

Product description

- STOPPERS are plugs which were developed for pressure-tight sealing of fibre cement and plastic distance tubes.
- Highly resistant plastic specially developed for this application
- Temperature range -35°C to +70°C
If the plugs are installed at ambient temperatures below 0°C, they have to be stored above freezing point for a better installation.
- All-weather installation
- Just drive them in and they are tight
- Little storage space required

YouTube



Tests

Water



Tube type	STOPPER maxi 22 water column	STOPPER mini 22 water column	STOPPER in 22 water column	STOPPER in 26 water column	Result when sealed on both sides
Plastic distance tube inner diameter approx. 21.5-23 mm	50 m	50 m	30 m	–	No water flow
Fibre cement distance tube inner diameter approx. 22 mm, round	40 m	40 m	20 m	–	No water flow
Steel distance tube inner diameter approx. 22.45 mm, round	40 m	40 m	20 m	–	No water flow
Steel distance tube inner diameter approx. 23 mm, round	30 m	30 m	20 m	–	No water flow
Plastic distance tube Inner diameter 26 mm	–	–	–	50 m	No water flow

Fire



- Fire resistance class EI 120 to DIN EN 13501-2 (STOPPER mini/STOPPER maxi)
Room closure test with fibre cement distance tubes
For the duration of the test (120 minutes), no cracks or gaps developed on the room side.
During this time, no flames were visible on the side facing away from the fire.
- Construction material class DIN EN 13501-1 E = normally flammable
 DIN 4102-1 B2 = normally flammable

Resistance



As well as undergoing a comprehensive slurry/liquid manure/silage effluent test, the plastic is also resistant to several media:

- | | | |
|-------------------------------------------------------------|---------------------------|-----------|
| ■ Slurry | ■ Fermentation mash | ■ Ozone |
| ■ Liquid manure | ■ Radon + methane gas | ■ Bitumen |
| ■ Silage effluent | ■ UV radiation | |
| Depending on the concentration
(Please consult our team) | ■ Diluted acids + alkalis | ■ Oils |

Sound insulation



Standard sound level differential testing
MFPA testing to DIN EN ISO 10140-2

A distance tube installed in concrete and sealed at both ends with the STOPPER achieves exactly the same standard sound level as monolithic concrete with the same component thickness.

Installation STOPPER in



The STOPPER in is pushed into the distance tube.



The STOPPER in is driven in with a 1500-2000 g hard rubber mallet.



Flush seal for distance tubes with lip.



Flush seal for distance tubes with cone.



The STOPPER in can be inserted to any depth.



After inserting the STOPPER in, a cone can be glued in.

STOPPER mini



Position and drive in the STOPPER mini



Sealing of distance tube with lip



Sealing of distance tube with cone

STOPPER maxi



Push the STOPPER maxi into the distance tube



Drive in with rubber mallet



Pressure-tight and flush seal

STOPPER SCREW in



Flush seal for
distance tubes
with lip.



Flush seal for
distance tubes
with cone.

STOPPER SCREW covered



Sealing of
distance tube
with lip.



Sealing of
distance tube
with cone.

ActiveRing + RONDO Mini

Outer seals for plastic and fibre cement distance tubes

ActiveRing external waterproofing



Art. no.	Description	PU	Weight	Price
047200	ActiveRing mini for outer pipe diameters 25-32 mm e.g. plastic distance tubes 22/26 26/31 26/32	Bag of 250 pcs.	1.70 kg per bag	€0.49 per pc.
047250	ActiveRing maxi for outer pipe diameters 38-42 mm e.g. fibre cement distance tubes	Bag of 250 pcs.	2.40 kg per bag	€0.59 per pc.



RONDO MINI



Technical details page 140

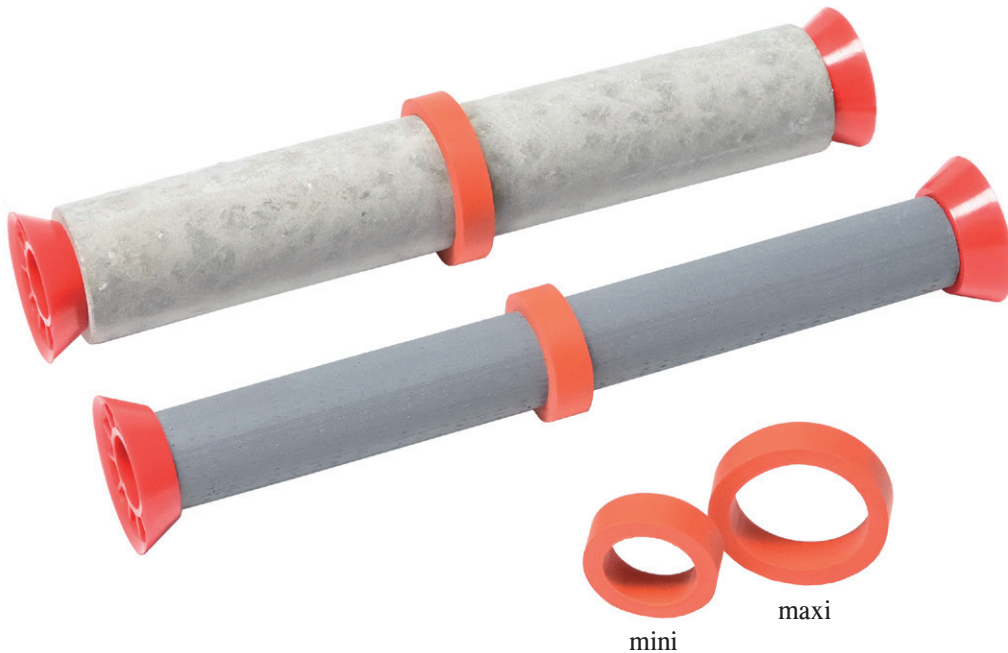
Art. no.	Type	Description	PU	Weight	Price
090870	RONDO MINI 26 Suitable for outer dia. 25-27 mm	for plastic distance tubes 22/26 mm Waterstop 2 cm Bearing width 2.7 cm	Bag of 50 pcs. incl. plastic fastening straps	0.030 kg	€1.40 per pc.
090873	RONDO MINI 40 Suitable for outer dia. 38-42 mm	for fibre cement distance tubes 22/40 mm Waterstop 2 cm Bearing width 2.7 cm	Bag of 50 pcs. incl. plastic fastening straps	0.040 kg	€1.50 per pc.



ActiveRing



The swelling external high-pressure seal for plastic and fibre cement distance tubes

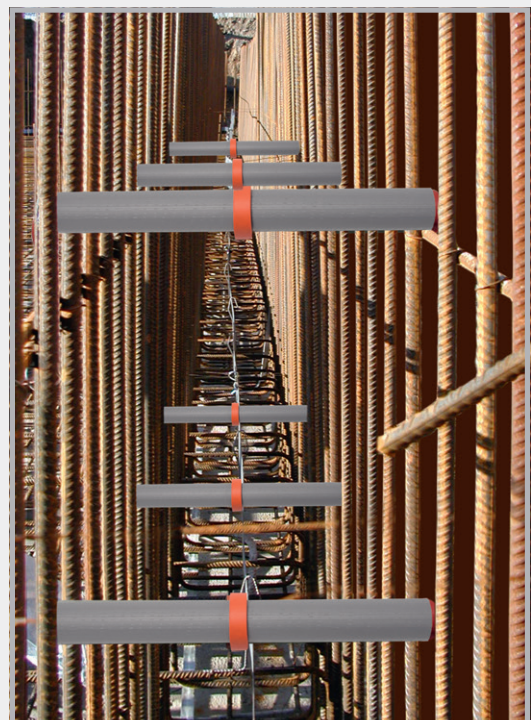


High-pressure seal for up to 8 bar

The ActiveRings mini and maxi ensure reliable and durable external waterproofing for plastic and fibre cement distance tubes.

- Pressure test performed by MFPA Leipzig
- Easy and secure installation
- Good chemical resistance
- Very cost-effective
- Push on and seal

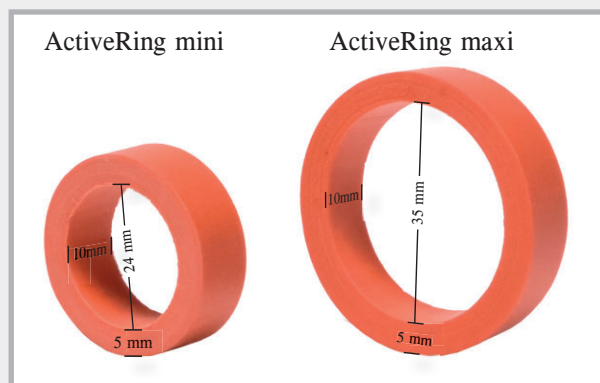
 YouTube



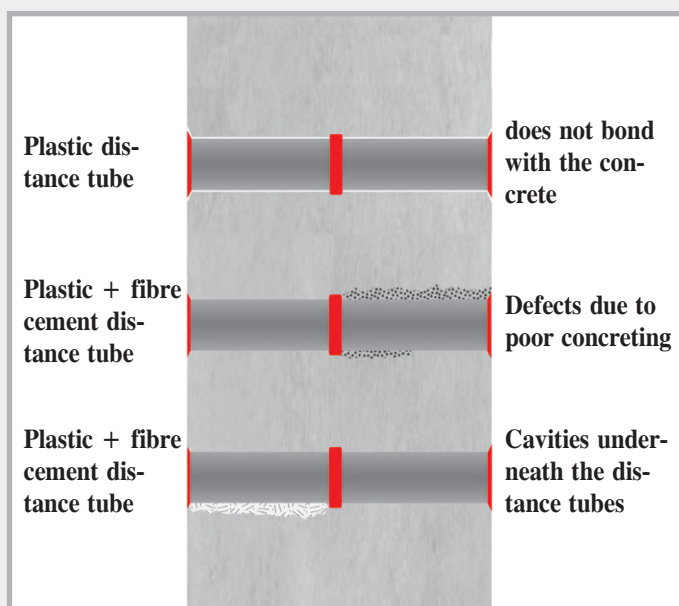
ActiveRing on plastic distance tubes

Product description for ActiveRings

The ActiveRings mini and maxi are made of a highly swellable TPE mixture. When the rings come into contact with water, they activate, swell up and reliably stop the flow of water.



Causes of leaking distance tubes

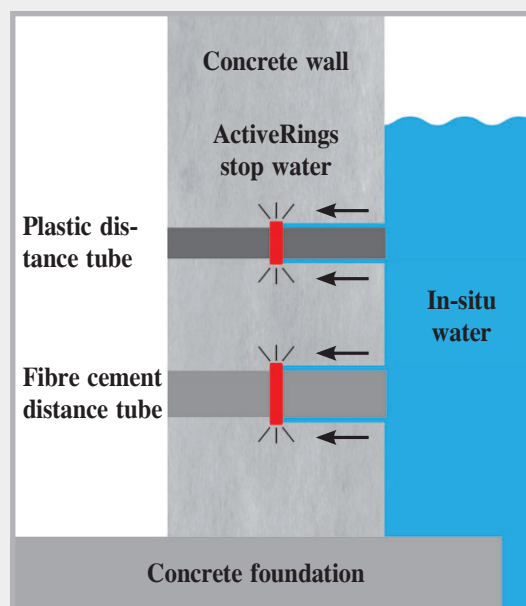


There are many causes which lead to leaking distance tubes. Plastic generally does not bond with concrete. The plastic breaks off and opens the way for water. The second main reason is poor concreting. Not only are plastic distance tubes affected, but also those made of fibre cement.

Technical data

Chemical basis:	Modified TPE
Colour:	Red
Finish:	Smooth
Dimensions:	Width 10 mm, thickness 5 mm
For outer pipe dia. 25–32:	mini version
For outer pipe dia. 38–42:	maxi version
Temperature range:	-30°C to +60°C
Storage:	Dry and protected
Function:	Highly swellable

ActiveRings provide security



This is how ActiveRings work: when the rings come into contact with water, they activate and stop the flow of water. The waterproofing remains permanently active when in contact with water.

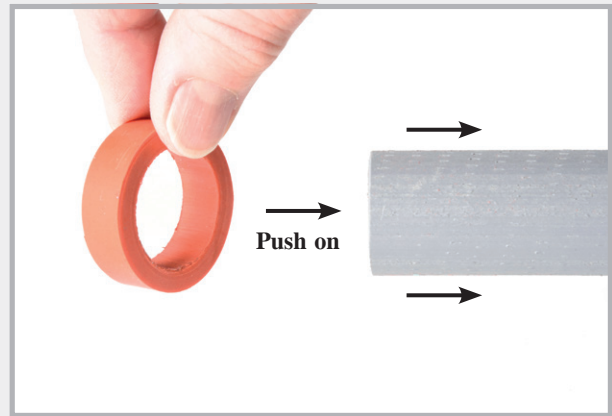
Resistance

- Diluted acids and alkalis
- Salt water
- Methane gas + radon
- Liquid manure + slurry
- Fermentation mash + biogas
- Concrete alkalinity
- Liquid aggressive to concrete

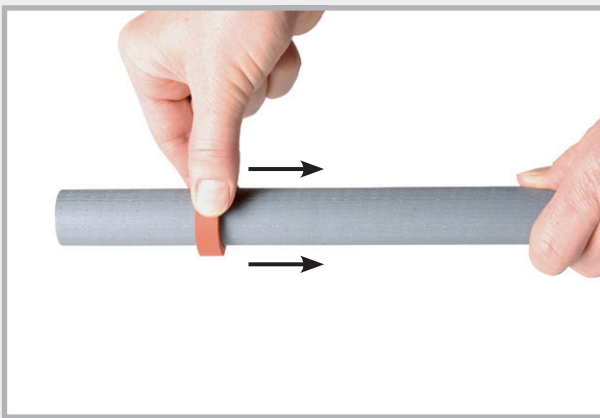
Quick and secure installation



The surfaces of the pipes must be clean.



The ActiveRing is pushed onto the distance tube which requires waterproofing.



Position the ActiveRing towards the middle



ActiveRings on different distance tubes

Plastic pipe 22/26 and 26/32

Fibre cement pipe 22/40

At the construction site



Wall formwork from above



Concreting in the distance tube with ActiveRing.

RONDO MINI sealing collars



for waterproofing of plastic or fibre cement distance tubes

RONDO MINI sealing collars can be mounted onto plastic or fibre cement distance tubes quickly and easily at the construction site.



Product description

Material: TPE polymer compound

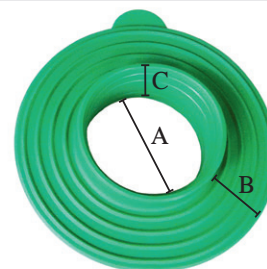
Installation: Temperature range -35°C to $+70^{\circ}\text{C}$

Resistance:

- Diluted acids + alkalis
- Liquid manure + slurry
- Fermentation mash
- Oils and bitumen
- Radon + methane gas



MINI 26



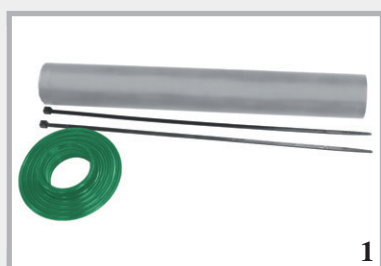
MINI 40

A Pipe slot with additional waterstops

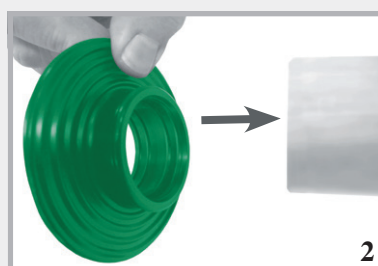
B Waterstop 2 cm

C Bearing width 2.7 cm

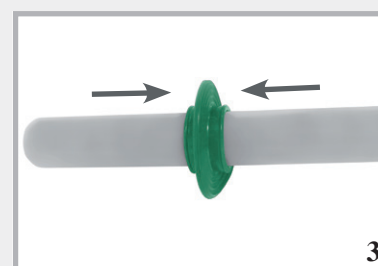
Quick and easy installation



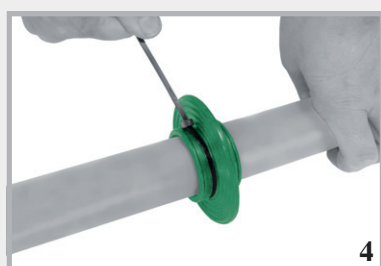
Fibre cement distance tube, Rondo Mini, 2 fastening straps



Slide the Rondo Mini onto the distance tube



Position Rondo Mini in the centre before fastening



Tighten both fastening straps by hand



The fastening straps can also be tightened using pliers



RONDO MINI installation complete

MURO-Top

Damp proof course



The barrier against rising damp.

MURO-Top damp proof courses

- made of the highly-resistant material polyolefin
- protect foundation walls and masonry reliably and permanently against rising damp
- profiled on both sides
- resistant to many media
- installed in a single layer with only 20 cm overlap at joint
- foils with a thickness of less than 1.2 mm are not suitable for applications requiring a General Building Supervisory Test Certificate

MURO-Top damp proof course



Sizes MURO-Top

Art. no.	Roll width	Roll length	Roll area	PU	Secondary packaging	Roll weight	Price per m ² per roll	
041115	11.5 cm	50 m	5.75 m ²	1 roll	Pallet of 500 rolls	approx. 1.65 kg	€0.91	€5.23
041150	15.0 cm	50 m	7.50 m ²	1 roll	Pallet of 400 rolls	approx. 2.10 kg	€0.91	€6.83
041175	17.5 cm	50 m	8.75 m ²	1 roll	Pallet of 350 rolls	approx. 2.45 kg	€0.91	€7.96
041200	20.0 cm	50 m	10.00 m ²	1 roll	Pallet of 300 rolls	approx. 2.80 kg	€0.91	€9.10
041240	24.0 cm	50 m	12.00 m ²	1 roll	Pallet of 240 rolls	approx. 3.40 kg	€0.91	€10.92
041250	25.0 cm	50 m	12.50 m ²	1 roll	Pallet of 240 rolls	approx. 3.50 kg	€0.91	€11.38
041300	30.0 cm	50 m	15.00 m ²	1 roll	Pallet of 200 rolls	approx. 4.20 kg	€0.91	€13.65
041365	36.5 cm	50 m	18.25 m ²	1 roll	Pallet of 160 rolls	approx. 5.15 kg	€0.91	€16.61
041425	42.5 cm	50 m	21.25 m ²	1 roll	Pallet of 150 rolls	approx. 5.95 kg	€0.91	€19.34
041500	50.0 cm	50 m	25.00 m ²	1 roll	Pallet of 120 rolls	approx. 7.00 kg	€0.91	€22.75
041750	75.0 cm	50 m	37.50 m ²	1 roll	Pallet of 100 rolls	approx. 10.50 kg	€0.91	€34.13
041000	100.0 cm	50 m	50.00 m ²	1 roll	Pallet of 80 rolls	approx. 14.00 kg	€0.91	€45.50

MURO-Top technical data

Material: Polyolefin, roughly textured on both sides

Thickness: 0.3 mm, 0.35 mm including profile

Weight: approx. 280 g/m²

Temperature range: -30°C to +60°C

Resistance:

- water-impermeable
- bitumen-compatible
- petrol-resistant
- ground water-resistant
- alkali-resistant
- rotproof
- diesel-resistant
- ground water-neutral

MURO-Premium

Damp proof course



Sizes MURO-Premium

Art. no.	Roll width	Roll length	Roll area	PU	Secondary packaging	Roll weight	Price	
							per m ²	per roll
042115	11.5 cm	25 m	2.88 m ²	1 roll	Pallet of 200 rolls	approx. 5.5 kg	€4.40	€12.67
042175	17.5 cm	25 m	4.38 m ²	1 roll	Pallet of 120 rolls	approx. 8.3 kg	€4.40	€19.27
042200	20.0 cm	25 m	5.00 m ²	1 roll	Pallet of 100 rolls	approx. 9.5 kg	€4.40	€22.00
042250	25.0 cm	25 m	6.25 m ²	1 roll	Pallet of 80 rolls	approx. 11.9 kg	€4.40	€27.50
042300	30.0 cm	25 m	7.50 m ²	1 roll	Pallet of 80 rolls	approx. 14.3 kg	€4.40	€33.00
042365	36.5 cm	25 m	9.13 m ²	1 roll	Pallet of 60 rolls	approx. 17.3 kg	€4.40	€40.17
042425	42.5 cm	25 m	10.63 m ²	1 roll	Pallet of 60 rolls	approx. 20.2 kg	€4.40	€46.77
042500	50.0 cm	25 m	12.50 m ²	1 roll	Pallet of 40 rolls	approx. 23.8 kg	€4.40	€55.00
042750	75.0 cm	25 m	18.75 m ²	1 roll	Pallet of 40 rolls	approx. 35.6 kg	€4.40	€82.50
042999	100.0 cm	25 m	25.00 m ²	1 roll	Pallet of 20 rolls	approx. 47.5 kg	€4.40	€110.00

Technical data

Material: PVC foil 1.2 mm, not compatible with bitumen, textured

Weight: approx. 1.9 kg/m²

Resistance:

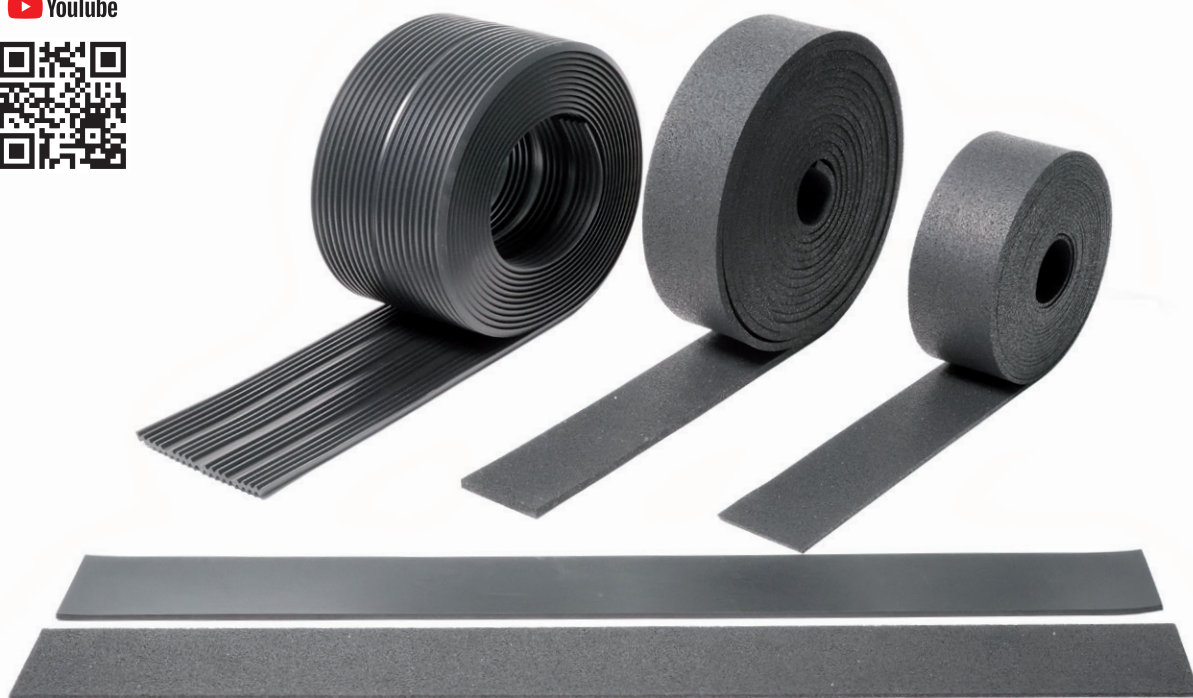
- water-tight 24 h/60 kPa
- water-tight during ageing
- water-tight in contact with alkalinity
- resistance to static loads ≥ 20 kg
- impact loading ≥ 300 mm
- tensile strength > 50 kN

Application

MURO-Premium damp proof courses are installed in a single layer with only 20 cm overlap at joint. The sheets can be joined using solvent welding agent.

IMPACT SOUND INSULATION + CORRUGATED BEARINGS

YouTube

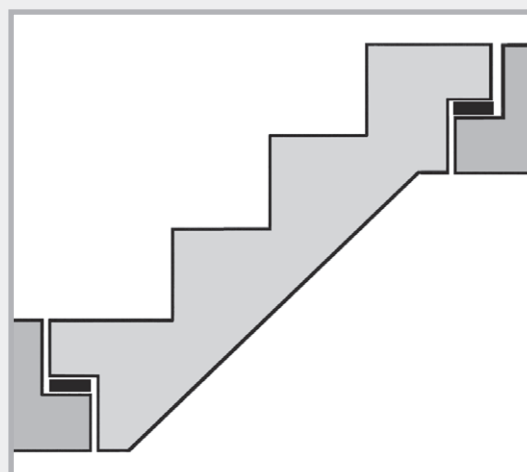


Impact sound insulation T1

Product description



Material:	The impact sound insulation T1 is made of fine mixed elastomer fibres bonded with PUR.	
Application:	As bearing for stairs and slabs	
Presentation:	Rolls, strips and boards	
Testing:	Load test	for thickness 10 mm up to 5 N/mm ²
	Impact sound reduction	up to 19 dB
Temperature resistance:	-40°C to +90°C	
Elongation at break:	> 70%	
Reaction to fire:	Class E	
Environmental aspects:	UV-resistant	

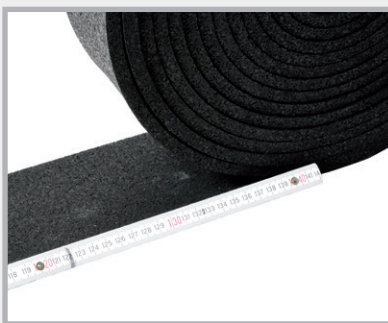


Impact sound insulation T1, e.g. for bearing of staircases

Installation without offcuts



Unroll T1



Measure required length



Simply cut off with the cutter.

Impact sound insulation T1

Rolls

Art. no.	Description	PU	Secondary packaging	Weight	Price
060240	Impact sound insulation roll T1 Size: 10000 x 100 x 5 mm	1 roll		4.40 kg per roll	€5.15 per m
060230	Impact sound insulation roll T1 Size: 10000 x 100 x 10 mm	1 roll	60 rolls per pallet	9.70 kg per roll	€7.55 per m
060115	Impact sound insulation roll T1 Size: 10000 x 1250 x 10 mm	1 roll		8.60 kg per m ²	€51.00 per m ²

Strips

Art. no.	Description	PU	Secondary packaging	Weight	Price
060200	Impact sound insulation strip T1 Size: 1000 x 100 x 5 mm	1 strip		0.44 kg per strip	€5.15 per m
060210	Impact sound insulation strip T1 Size: 1000 x 100 x 10 mm	1 strip	750 strips per pallet	0.90 kg per strip	€7.55 per m

Boards

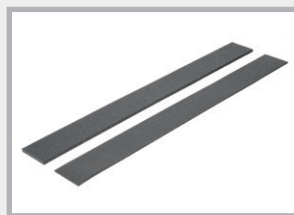
Art. no.	Description	PU	Weight	Price
060100	Sound insulation board T1 Size: 1000 x 1000 x 5 mm	1 board	4.60 kg per board	€31.85 per m ²
060110	Sound insulation board T1 Size: 1000 x 1000 x 10 mm	1 board	9.00 kg per board	€51.00 per m ²
060113	Sound insulation board T1 Size: 1000 x 1000 x 20 mm	1 board	18.00 kg per board	€96.50 per m ²



Art. no. 060240
Art. no. 060230



Art. no. 060115



Art. no. 060200
Art. no. 060210



Art. no. 060100
Art. no. 060110
Art. no. 060113

Corrugated bearings

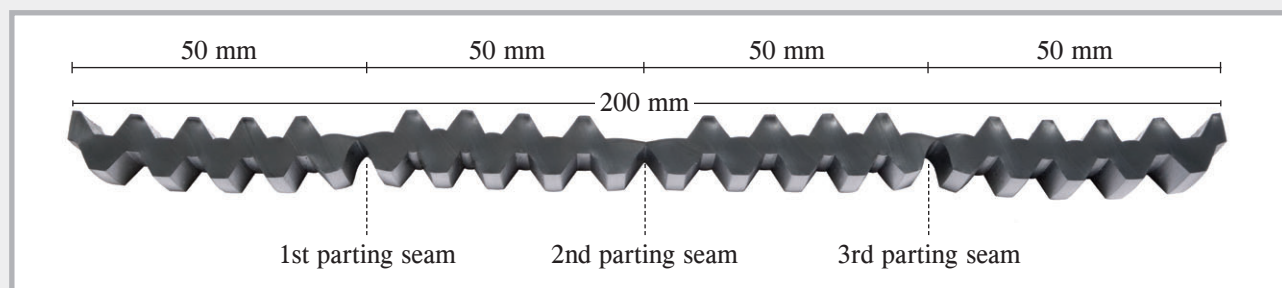


Product description

Material: The corrugated bearing is a profiled bearing based on EPDM.

Application: As bearing for stairs and slabs
Bearing of prefabricated elements

YouTube



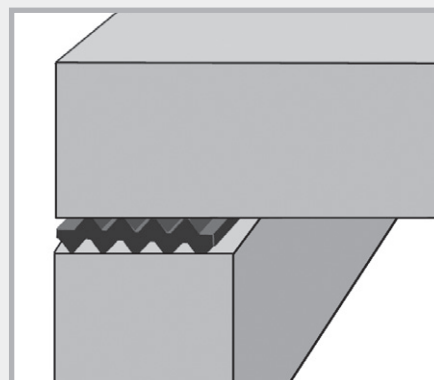
Presentation: Rolls

Testing: Load test up to 5 N/mm²
Impact sound reduction up to 20 dB

Temperature resistance: -40°C to +90°C

Elongation at break: > 300 %

Environmental aspects: UV-resistant, halogen-free



Corrugated bearing between two constructional elements

Product range - corrugated bearing

Art. no.	Description	PU	Weight	Price
060010	Corrugated bearing 10 mm Size: 10000 x 200 x 10 mm with 3 parting seams	1 roll	16.0 kg per roll	€130.30 per m ²

Application



Corrugated bearings



The corrugated bearings can be cut with a cutter. Cut into the parting seam, the corrugated bearing can then be processed.

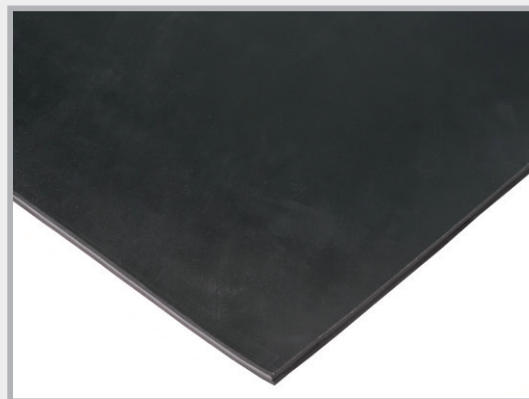


Over a width of 20 cm the corrugated bearing has 3 parting seams. This enables bearing widths of 5, 10, 15 and 20 cm.

Construction bearing R1

Product description

Material:	NR-SBR copolymer
Application:	Separation of 2 components Bearing of stairs Levelling out of unevenness
Presentation:	Boards + strips
Temperature resistance:	-25°C to +70°C
Elongation at break:	> 200 %



Product range - construction bearing R1

Strips

Art. no.	Description	PU	Weight	Price
060340	Construction bearing strip R1 Size: 1000 x 100 x 5 mm	1 strip	0.75 kg per strip	€5.25 per m
060330	Construction bearing strip R1 Size: 1000 x 100 x 10 mm	1 strip	1.60 kg per strip	€8.15 per m

Boards

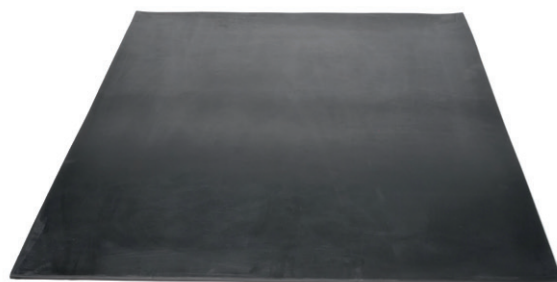
Art. no.	Description	PU	Weight	Price
060310	Construction bearing board R1 Size: 1200 x 1000 x 5 mm	1 board	9.50 kg per board	€43.40 per m ²
060300	Construction bearing board R1 Size: 1200 x 1000 x 10 mm	1 board	18.00 kg per board	€66.65 per m ²

Tailor-made sizes available at short notice

Art. no. 060340 + 060330



Art. no. 060310 + 060300



Rib laths



Lost formwork for construction joints in concrete

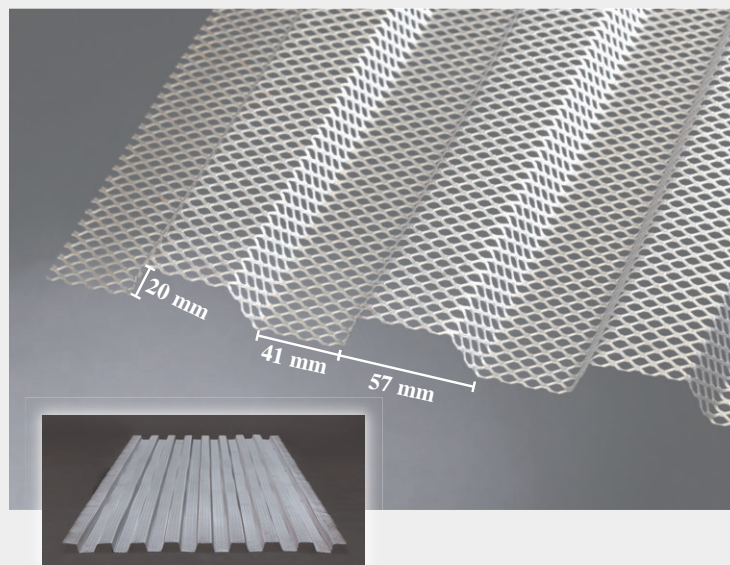
LinkFix stopend panel

Profiled rib lath formwork as stopend panel for construction joints

Material: Profiled rib lath formwork of bright steel, thickness 0.75 mm. The profile corresponds to DIN 1045-1 and EC2 and is therefore to be classified as a toothed construction joint.

Profile: 57 x 41 x 20 mm

Sheet size: Length 240 cm
Width 80 cm



Art. no.	Description	PU	Weight kg	Price
020050	LinkFix Thickness 0.75 mm Size: 240 x 80 cm	Pallet of 100 pcs. = 192 m ²	530 kg/pallet m ² approx. 2.6 kg	€12.30 per m ²

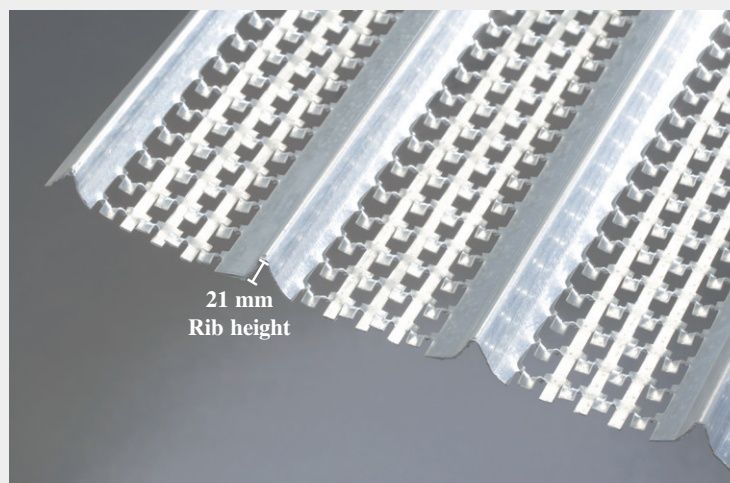
Rib lath formwork, high-ribbed

Lost formwork for construction joints

- Developed for concrete construction
- Extremely stable
- Perfect bond between concrete segments
- Very good malleability

Material: Galvanised

Rib height: 21 mm



Art. no.	Description	PU	Secondary packaging	Weight	Price
020005	High-ribbed Thickness 0.3 mm , galvanised Size: 200 x 45 cm, rib height 21 mm Identification colour: green	Pallet of 200 pcs. = 180 m ²	3 pallets	480 kg per pallet m ² approx. 2.7 kg	€7.45 per m ²
020010	High-ribbed Thickness 0.4 mm , galvanised Size: 200 x 45 cm, rib height 21 mm Identification colour: blue	Pallet of 100 pcs. = 90 m ²	5 pallets	306 kg per pallet m ² approx. 3.4 kg	9.00 per m ²
020020	High-ribbed Thickness 0.5 mm , galvanised Size: 200 x 45 cm, rib height 21 mm Identification colour: red	Pallet of 100 pcs. = 90 m ²	4 pallets	360 kg per pallet m ² approx. 4 kg	10.10 per m ²

Rib lath formwork, medium-ribbed

Lost formwork for construction joints.

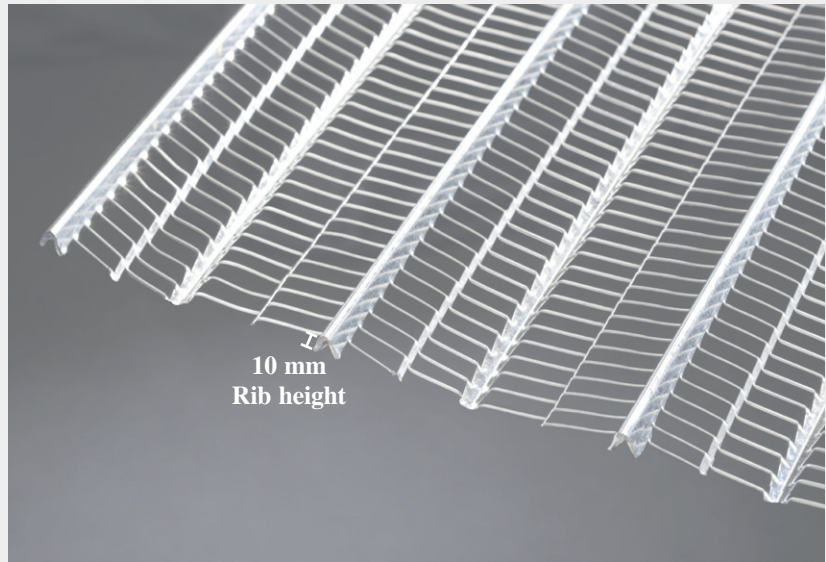


- Effective bond between concrete segments
- Good malleability

Material: Galvanised

Rib height: 10 mm

Sheet size: Length 250 cm
Width 60 cm



10 mm
Rib height

Art. no.	Description	PU	Secondary packaging	Weight	Price
020040	Thickness 0.30 mm , galvanised Size: 250 x 60 cm = 1.5 m ² Rib height approx. 10 mm Identification colour: black	Package of 20 sheets = 30 m ²	25 packages per pallet = 750 m ²	approx. 36 kg per package 1.20 kg/m ²	€5.80 per m²

Rib lath formwork, flat-ribbed



Lost formwork

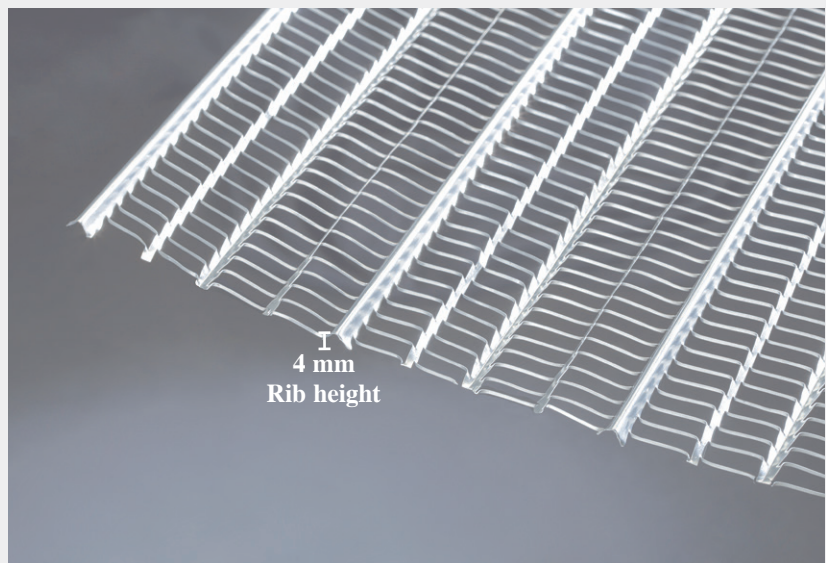
- Effective bond between concrete segments
- Highly malleable

Material: Galvanised

Rib height: 4 mm

Thickness: 0.25 mm

Sheet size: Length 250 cm
Width 60 cm



4 mm
Rib height

Art. no.	Description	PU	Secondary packaging	Weight	Price
020045	Thickness 0.25 mm , galvanised Size: 250 x 60 cm = 1.5 m ² Rib height approx. 4 mm Identification colour: yellow	Package of 20 sheets = 30 m ²	30 packages per pallet = 900 m ²	approx. 24 kg per package 0.80 kg/m ²	€3.80 per m²

Shipping costs for deliveries FCA

Parcel shipment in Europe

Country	Belgium Netherlands Luxembourg Austria	Denmark Switzerland Czech Republic Liechtenstein	France Monaco Great Britain	Italy Poland Slovakia Slovenia Hungary	Sweden Ireland Spain Portugal	Estonia Finland Latvia Lithuania Norway	Bosnia and Herzegovina Croatia Serbia	Bulgaria Romania Iceland Greece
Transit time days	1-2 days	1-3 days	2-3 days	3-5 days	3-5 days	3-5 days	3-6 days	3-6 days
up to 15 kg	€17.00	€20.00	€23.00	€25.00	€31.00	€36.00	€40.00	€50.00
up to 30 kg	€24.00	€27.00	€29.00	€31.00	€40.00	€44.00	€47.00	€61.00

Payment of duty: Switzerland, Liechtenstein, Iceland, Norway €35

Art. no. 09000001

Parcel shipment with Express Europe

Country	Belgium Netherlands Luxembourg Austria	Denmark Switzerland Czech Republic Liechtenstein	France Monaco Great Britain	Italy Poland Slovakia Slovenia Hungary	Sweden Ireland Spain Portugal	Estonia Finland Latvia Lithuania Norway	Bosnia and Herzegovina Croatia Serbia	Bulgaria Romania Iceland Greece
up to 30 kg			Price available on request					

Coordinate express deliveries by telephone with our sales team.

The feasibility of every express delivery must be checked and confirmed.

Please note that the order must be placed by 11 o'clock to guarantee that the shipment will be dispatched on the same day.

Notes

Conditions of Sale

As at 01.01.2020

The following conditions apply to all quotations and sales. The Buyer accepts them by acceptance of our quotations/invoices.

1. Quotations, recommendations, advice

Our quotations are valid in case of immediate acceptance only, otherwise they are without obligation. Stock information is given without any commitment.

Samples and specimens are for guidance only and without any commitment. Recommendations and advice are given to our best knowledge, but without obligation. We will not be liable due to defaulted or insufficient advice, regardless of whether or not the Buyer had asked for advice.

2. Invoicing

If not otherwise agreed and stated, invoicing is always done at our prices valid on the day of dispatch, ex warehouse, not including the statutory value added tax.

3. Shipment and transfer of risk

The Vendor effects shipment for the Buyer with due care. Liability, however, is limited to intent and gross negligence. The goods are transported by a parcel delivery company or forwarding agent. The goods are insured according to the relevant conditions of the carrier and the scope of the carrier's insurance policy. If the Buyer collects, the risk shall transfer to the Buyer when the goods are handed over.

The following applies to domestic deliveries: Deliveries made free of charge are sent as DAP shipments under the rules of Incoterms 2020. Domestic deliveries made ex works are organised and dispatched by us, the goods are made available to the customer in the same manner as deliveries made free of charge. The costs of dispatch are passed on to the customer, otherwise the risk is transferred as soon as the goods are made available to the customer at a designated location.

To other European countries and all countries outside the EU the goods are provided according to the rules of the current Incoterms 2020®. An Incoterm is chosen in each individual case in consultation with the Buyer.

4. Delivery

Periods of delivery that have been agreed upon are approximate only, unless a fixed date has been agreed in writing. Should we have not been able to deliver even after having been granted an additional respite of min. two weeks in written form, the Buyer is entitled to withdraw from the contract. Other claims arising from delayed delivery are inadmissible. Acts of God like strikes, plant closures, plant interruptions, transportation problems due to lack of vehicles or containers, railway and road blocks as well as all events beyond our control shall exempt us from our delivery commitments for the duration of the obstacles.

5. Return of goods

Goods may be returned with prior consent of MASTERTEC GmbH & Co. KG only. Goods which are not defective will be accepted in impeccable original condition only. 15% of the value of the goods, but minimum € 20 will be deducted from the credited amount. Return shipments sent freight collect will not be accepted. The return shipment is effected at the buyer's risk.

6. Payment

The terms of payment are based upon an agreement. Should a cash discount be granted, the pre-condition is that payment of all previous invoices is settled. The cash discount is granted on the net invoice amount only. Default shall occur without prior reminder if the period allowed for payment is exceeded or in case of incomplete payment. We are entitled to charge default interest of min. 3% above the relevant bank

rate of the German Central Bank as of the due date, irrespective of any other claims. Should the Buyer's creditworthiness turn out to be insufficient after conclusion of the contract, the Vendor is entitled to demand – at his own option – advance payment or provision of security for due or undue claims from all existing contracts and to refuse fulfillment until receipt of the advance payment or provision of security for due or undue claims from all existing contracts and to refuse fulfillment until receipt of the advance payment or provision of security.

7. Retention of title

Goods remain our property until receipt of complete payment (in case of payment by cheque/bill of exchange until final encashment). The title will not pass to the Buyer before all debts arising from consignments have been paid. For open accounts the retention of title serves as a security for our balances receivable.

The Buyer is entitled to sell the goods in the orderly course of business. The goods must neither be pledged nor assigned by way of security. The Buyer shall inform us without delay of any other interference with our rights by third party. If the Buyer sells the goods delivered by us, he assigns to us his receivables resulting from the sale including all accessory rights until complete discharge of liabilities to us.

Goods under retention of title shall always be processed to the exclusion of any acquisition of title under § 950 of the German Civil Code. Processing is done by the Buyer on the Vendor's behalf but without incurring any commitment on the Vendor's part.

In the event of any processing by the Buyer, the Vendor shall have the right of co-title to the new product to the amount of the invoice value of the processed goods under retention of title.

8. Notice of defect and warranty

The Buyer can file complaints only before use, sale or mixing of the goods. Complaints are to be filed within 8 days after receipt of the goods in written form. Notice of defects detected after that period must be filed to us immediately, i.e. without undue delay, in writing and can be recognised only if detection was impossible by inspection within a period of 8 days after receipt. Complaints filed after one month after receipt of the goods are not admissible under any circumstances.

In any case, defects detectable by proper inspection before use, sale or mixing of the goods can only be claimed if the rejected goods are still in the packaging used by us.

In case of a justified complaint, the Buyer has the right of exchange of the goods. Claims for cancellation of sale, reduction of the purchase price or damages as well as claims for compensation for any consequential damage are not admissible.

9. Damages

Any claims for damages by the Buyer that may arise directly or indirectly from ordering, delivery or use of our goods, regardless of the legal basis, are inadmissible, provided that we, our assistants, or our agents have not caused the damage by gross negligence or intention.

In case of damage caused by gross negligence, the claim for damages of a Buyer who is a merchant is limited to the compensation of the anticipated damage. Any claim for damages because of delayed performance or impossibility of performance due to slight negligence from a Buyer who is not a merchant will not be considered.

10. Place of fulfillment and jurisdiction

The place of fulfillment for deliveries (also for deliveries free domicile) is the relevant place of shipment, for payment Oberhaid as the Vendor's place of business.

The place of jurisdiction for all parties, also for suits upon bills or cheques is Bamberg. The Vendor is free to choose another admissible place of jurisdiction.

Items made to order (materials from object-related production) are barred from repurchase.

Notes on the price list

All prices exclusive of VAT. We cannot be held responsible for misprints.

Oral and written advice is non-binding.

All prices are non-binding recommended sales prices.

The prices charged are those valid on the day of dispatch. No part of this publication may be reproduced without our prior permission.



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